Horgan, Carole

From: Info / Info (DFO/MPO)
Sent: May-17-19 1:35 PM
To: Wadden, Christine R
Subject: FW: Cut Throat Trout

Hello,

The following request was received via Fisheries and Oceans Canada's general enquiry service. Please reply directly to the correspondent or find someone who can.

Kindly provide us with a copy of the response that has been sent to the correspondent so we may close our file.
Thank you,
Jodi
General Enquiries
Fisheries and Oceans Canada / Government of Canada
200 Kent Street, Ottawa ON K1A 0E6
info@dfo-mpo.gc.ca / Tel: 613-993-0999 / Fax: 613-990-1866 / ATS: 1-800-465-7735

Renseignements généraux
Pêches et Océans Canada / Gouvernement du Canada 200, rue Kent, Ottawa (ON) K1A 0E6 info@dfo-mpo.gc.ca /Tél : 613-993-0999 / Téléc : 613-990-1866 / TTY: 1-800-465-7735 -----Original Message-----
From:
Sent: Friday, May 17, 2019 1:42 AM
To: Info / Info (DFO/MPO) <Info.XNCR@dfo-mpo.gc.ca>
Subject: Cut Throat Trout

To whom it may concern

I own private property owner near that is in the historical habitat of western cut throat trout. There is a small pond on this property that does not have any fish. Would DFO be interested in stocking cutthroat trout in this pond as part of the recovery plan? Happy to provide further details if you're interested.

Sincerely,

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Wednesday, June 12, 2019 5:59 AM
To: Watson, Ernest
Subject: FW: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

From: [redacted]
Sent: Friday, June 7, 2019 11:30 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Len.Webber.C1@parl.gc.ca
Subject: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

To whom it may concern,

I applaud the federal government for the release of its draft plan to recover westslope cutthroat trout in Alberta. By expanding the designation of their critical habitat to include upstream creek channels and riparian areas, this document recognizes and strengthens protection of this important species of Alberta trout. Sadly, however, with the four-year delay of this new plan, business as usual has degraded existing habitat and trout populations have predictably suffered. Now that we've lost time and ground in this important battle to preserve valuable parts and populations of the natural world, it is all the more important that we bolster our efforts by looking at the whole catchment area of the watershed, and by accepting science-based population targets for recovery of the species.

"An environmental setting developed over millions of years must be considered to have some merit. Anything so complicated as a planet, inhabited by more than a million and a half species of plants and animals, all of them living together in a more or less balanced equilibrium in which they continually use and reuse the same molecules of soil and air, cannot be improved by aimless and uninformed tinkering."
British economist E. F. Schumacher

Sincerely yours,

[redacted]

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Wednesday, June 12, 2019 5:58 AM
To: Watson, Ernest
Subject: FW: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

1st comment on WSCT doc received n NHQ.

From: [redacted]
Sent: Thursday, June 6, 2019 8:25 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>; members@mail.rmlca.ab.ca
Subject: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

You have to rethink this proposal. I strongly agree that westslope cutthroat are important and should be given a chance to thrive but basically precluding all activities in the foothills is not going to do it and will make the fine people of Alberta into criminals. There are many good people enjoying healthy activities or working hard to make an honest living who are going to be negatively impacted and the reaction will harm all of us.

Please consider actually investing some energy to affect real change in the behaviour which harms watercourses. I emplore you to Educate yourself about the 5E principals as described at www.trails4tomorrow.ca

Yours, in conservation,
[redacted]

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Thursday, July 4, 2019 6:36 AM
To: Watson, Ernest
Subject: FW: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

1st comment received in NHQ for the WSCT aRS

From: Amanda J Miller <amanda.j.miller@gov.ab.ca>
Sent: Wednesday, July 3, 2019 6:35 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Subject: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Hi,

I do think that there is an issue with how grazing is portrayed throughout as a land use incompatible with maintaining riparian habitat and integrity.

3.2.2 Adverse Effects on Habitat
Issues associated with habitat loss/degradation include changes in flow, sedimentation, habitat loss (including river training), habitat fragmentation, and grazing.

- I don't understand why grazing is even in this sentence, it doesn't make sense. There can be negative impacts from improper grazing (overgrazing) but they are captured in the other items noted (habitat degradation, sedimentation) and it doesn't make sense for grazing to be noted as a stand alone.

Grazing livestock (cattle) has impacts on riparian integrity, channel form, and fine sediment delivery, which are well-known within the Alberta native range of westslope cutthroat trout (Adams and Fitch 1995; Paul and Boag 2003) and elsewhere (Gresswell et al. 1989; Platts 1991; Armour et al. 1994; Wohl and Carline 1996). Grazing is a common land use throughout the native range outside of national parks, so habitat damage from that source could be widespread within the native range of westslope cutthroat trout in Alberta. However, actual impacts in Alberta have not been measured.

- Grazing co-evolved on the landscape along with westslope cutthroat trout – there have always been large ungulate grazers in the province, and so how can 'grazing' itself be the issue? This should be re-written to note that overgrazing can have negative impacts, not to portray it in a light that applies it to any and all grazing. The way it is currently written implies that grazing is incompatible with maintaining riparian areas. There's been an awful lot of work done (some of it cited within this recovery plan – eg. Caring for the Green Zone) that both illustrates that grazing is compatible with maintaining riparian habitat and providing strategies on how to do so. The Alberta Habitat Management Society provides a lot of this information at http://cowsandfish.org/publications/assessment.html
- If actual impacts have not been measured then how can this statement be made?

Amanda

Amanda J Miller
M.Sc., P.Ag.
Provincial Rangeland Specialist – Grasslands
Environment and Parks
amanda.j.miller@gov.ab.ca

(403) 382-4297
(403) 339-1371 (cell)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Tuesday, July 9, 2019 12:28 PM
To: Watson, Ernest
Subject: FW: CPAWS Comments on draft Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada
Attachments: CPAWS Comments on WSCT Recovery and Action Plan_8July19.pdf

From: Katie Morrison [redacted]
Sent: Monday, July 8, 2019 6:28 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: ec.ministre-minister.ec@canada.ca; Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>; aep.minister@gov.ab.ca; paul.christensen@gov.ab.ca; rob.simieritsch@gov.ab.ca
Subject: RE: CPAWS Comments on draft Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Apologies. Comments attached.

From: Katie Morrison [mailto [redacted]
Sent: July 8, 2019 4:03 PM
To: SARA/LEP.XNCR@dfo-mpo.gc.ca
Cc: ec.ministre-minister.ec@canada.ca; min@dfo-mpo.gc.ca; aep.minister@gov.ab.ca; paul.christensen@gov.ab.ca; rob.simieritsch@gov.ab.ca
Subject: CPAWS Comments on draft Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Please find attached CPAWS Southern Alberta's comments on the draft Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada. Please let me know if you have any additional questions.

Thank you,
Katie

Katie Morrison, M.E.Des., P.Biol.
Conservation Director
CPAWS Southern Alberta Chapter
Office: (403) 232-6686
Cell: (403) 463-6337
[redacted]

CPAWS
CANADIAN PARKS AND WILDERNESS SOCIETY
SOUTHERN ALBERTA CHAPTER

SUPPORT CPAWS SOUTHERN ALBERTA CHAPTER

CPAWS
CANADIAN PARKS AND WILDERNESS SOCIETY
SOUTHERN ALBERTA CHAPTER

c/o Canada Olympic Park
88 Canada Olympic Way SW
Calgary, AB, T3B 5R5
Phone: (403) 232-6686
cpaws-southernalberta.org

Director
SARA Directorate
Department of Fisheries and Oceans
200 Kent St.
Ottawa, ON
K1A 0E6
SARA/LEP.XNCR@dfo-mpo.gc.ca

RE: CPAWS Southern Alberta comments on the draft Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) in Canada

Dear SARA Directorate,

Please accept these comments on behalf of the Canadian Parks and Wilderness Society (CPAWS) Southern Alberta Chapter on the 2019 draft Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) in Canada ("the Plan").

CPAWS' mission is to preserve the integrity of Canada's wild spaces, this includes supporting the recovery of threatened species. CPAWS Southern Alberta has been involved in the recovery planning for Westslope Cutthroat Trout in Alberta and is also very involved in land-use and recreation planning and forestry management issues that directly impact the recovery of the species.

Overall, CPAWS Southern Alberta generally supports the objectives and broad strategies and actions of the recovery plan, however, we have a number of serious concerns with implementation of these approaches and actions, and have provided a number of recommendations for improving the Plan.

Strengths

We are encouraged to finally see a draft Action Plan for this species. Key strengths of the Plan include:

- Expansion of Critical Habitat to include near-pure populations of Westslope Cutthroat Trout (WSCT) (≥ 95% pure);
- Expansion of Critical Habitat to areas upstream of current areas of occupancy and into other potential recovery areas;
- Positive recovery measures, including measures that increase and improve knowledge of the species and habitats, limit the spread of non-native species, restore populations and habitats, manage and reduce the footprint of human activities, and increase

education and outreach. However, the specifics of how these measures will be implemented needs to be clearly defined;
- The acknowledgment that current Critical Habitat designations are insufficient to recover the species is important to incent better WSCT management on lands and waters outside of designated Critical Habitat.

Weaknesses

While the intent of the Plan is positive, there are a number of weaknesses or gaps that render the Plan less effective - largely related to designation and management of Critical Habitat. WSCT now occupy less than 5% of their original distribution, in part due to loss or degradation of habitat. For this reason, it is imperative that their Critical Habitat is designated in a manner that protects all areas of land and water that influence habitat conditions in areas they currently use, and may use in the future. We are also facing an era of uncertainty in the face of climate change; as such, Critical Habitat also needs to consider future climate conditions and climate refugia.

We are concerned that the definition of Critical Habitat in this proposed recovery strategy and action plan is insufficient to adequately protect WSCT from further habitat degradation and loss. The main concerns we have for Critical Habitat are:

- Definition of Critical Habitat;
- Lack of clarity on assessment, monitoring and enforcement in Recovery Measures;
- Lack of clarity on further studies.

Definition of Critical Habitat

While the area of occupancy approach used in the 2013 provincial Recovery Plan was insufficient, we are concerned that the bounding box approach identified in the Plan will also not capture the Critical Habitat necessary for species recovery. The bounding box approach does not acknowledge that land-use and associated disturbances outside the area of occupancy or potential recovery areas can impact habitat conditions within these areas. This is particularly relevant for areas upstream that could impact habitat conditions and attributes downstream.

CPAWS Southern Alberta asserts that the entire subwatershed within which WSCT occur, or could potentially occur with expansion, should be designated as Critical Habitat. Barring such a holistic approach, at a minimum Critical Habitat should be designated for all areas identified in Appendix D as "areas within which Critical Habitat can be found". Without Critical Habitat level protection on this entire area, potentially damaging activities within this area may not be adequately assessed and managed to protect downstream or adjacent important areas of occupancy or potential recovery areas. We also believe that the entire watershed that contains this Critical Habitat should be designated for special management to ensure that upland land uses that affect instream habitat are properly managed to protect and recover WSCT.

While instream Critical Habitat should be designated for the entire area, the bounding box approach is a good tool for identifying areas to prioritize habitat and recovery actions focused on range expansion. However, CPAWS Southern Alberta also believes that more clarity is needed

on how the criteria will translate to on the ground protection and recovery. For example, while the Plan states that "not all attributes in Table 2 must be present in order for a feature to be identified as Critical Habitat", it does not state which ones or how many criteria must be present, who will determine and decide which areas qualify as Critical Habitat and which do not, how often this approach and criteria will be updated, or what the plan is for areas or features that may change in the future. These details are necessary to assess the effectiveness of Critical Habitat in WSCT protection and recovery.

While the Plan identifies climate change as a threat to WSCT, the definition of Critical Habitat does not appear to take into account areas of climate refugia or areas that may become important habitats in the future that need to be protected now. The uncertainty of climate change makes it all the more important to designate the entire area as Critical Habitat beyond existing areas of occupancy and areas identified by the bounding box criteria.

We are also concerned about the use of insufficient riparian buffers in the Critical Habitat designation. While it is encouraging to see that riparian areas will be included, a 30 m buffer width is not enough to mitigate upland effects on instream habitats. We acknowledge that this was identified as further research to be conducted, however there is existing literature that identifies 100 m as a minimum buffer distance[1], and the precautionary principle should be used in defining Critical Habitat. Alberta currently uses 100 m from the high water mark for forest management guidelines, watercourse crossing guidelines and land use planning. Aligning Critical Habitat with existing science and standards creates better protection for trout and clarity for land users. At minimum, a 100 m buffer from the high water mark on both sides of the stream should be included as Critical Habitat. However, a 100 m buffer from the top of slope would be preferable. We do recognize that this issue is identified to be researched further.

Another concern on the designation of Critical Habitat is regarding groundwater source areas. These source areas provide cold, clean water into streams used by or potentially used by WSCT. Springs that contribute to WSCT habitat should be included in Critical Habitat designation if the entire subwatershed is not designated.

We also note that a number of creeks, including Blairmore, Allison, Flat, Todd, Helen, and Outlet Creeks, have been removed from Critical Habitat identified in the previous 2014 Federal Recovery Strategy without explanation. Why were these creeks removed? We understand that some of these creeks may not have pure or near-pure WSCT populations, but to the best of our knowledge Allison and Blairmore Creeks do have near-pure populations. The Plan should include these important habitats in Critical Habitat designation. Critical Habitat should not be removed without a transparent and science-based justification on why the habitat is no longer current or potential expansion habitat. If damage to habitat occurs which causes it to no longer meet the criteria, all efforts should be made to restore said habitat rather than removing it from designated Critical Habitat.

[1] Valdal, E. J., & Quinn, M. S. (2011). Spatial Analysis of Forestry Related Disturbance on Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi): Implications for Policy and Management. Applied Spatial Analysis and Policy, 4, 95-111.

Lack of Clarity on Assessment, Monitoring and Enforcement in Recovery Measures

While the Plan lays out general approaches to species recovery, the final plan needs to include more information on how potentially damaging activities in Critical Habitat will be assessed, enforced, and monitored, and how recovery actions will be implemented. Critical Habitat will not be adequately protected without proper assessment and enforcement of appropriate land use activities and clear protection measures. The Plan needs more detailed on-the-ground actions that will be taken to protect, enforce, and restore Critical Habitat.

Section 4.3 lists a series of activities that are likely to result in the destruction of Critical Habitat, but also states that this does not necessarily result in their automatic prohibition, and they too will be evaluated on a case-by-case basis by DFO or Parks Canada. We are very concerned that this statement, without any additional information or criteria on the decision-making process, will allow business as usual and further damage to WSCT Critical Habitat. The final Recovery Strategy and Action Plan needs to include further information on how these activities will be evaluated, and what criteria and process will be used to determine whether they are approved to proceed. Justification for any decision on development or land-uses within Critical Habitat should be publicly available. The plan should also clearly state that decisions will be made using the precautionary principle.

Additionally, the Plan states that Critical Habitat designation excludes anthropogenic structures that already exist, but that the installation/maintenance/etc. of those structures will be evaluated by DFO or Parks Canada. While anthropogenic structures are obviously not themselves Critical Habitat, existing structures or land uses need to undergo the same level of assessment and must meet clearly defined criteria in order to determine existing and ongoing impacts, and to mitigate effects on adjacent or downstream Critical Habitat. For example, an existing structure such as a bridge could have existing and ongoing impacts on Critical Habitat which need to be assessed and addressed to eliminate or minimize impacts. Existing structures in the area we recommend as Critical Habitat should undergo the same level of impact assessment as new structures. However, the current wording of the Plan does not require such assessment or mitigation.

Likewise, the Plan identifies a recovery approach to "manage and reduce footprint of human activities", including the measure to "increase prominence of native fish conservation in recreation planning and land-use management...". This approach is very important and should also include specifics on how habitat will be protected through this measure and how native fish conservation specifically will be included in planning and management.

While the Plan does provide guidance on how to address current threats to the WSCT population, it is missing a clear path forward to prevent future disturbance to the species and its habitat. The Plan should include clear steps that will be taken to reduce threats to WSCT populations going forward.

Lack of Clarity on Further Studies

While CPAWS Southern Alberta supports new and ongoing studies to better protect and recover WSCT, the Plan needs further detail to be added to ensure the appropriate studies are done in a timely manner. The plan acknowledges that current Critical Habitat and current reaches of genetically pure WSCT are insufficient to maintain viable populations long-term. However, the schedule of studies to identify further Critical Habitat is very general and broad. The plan outlines descriptions of studies that are needed, but there is no concrete summary of what studies will be completed, what the priority areas of research are, who will undertake this research, or clear timelines/deadlines.

The plan also needs a way to manage new and existing development within the "areas within which Critical Habitat can be found" while the studies are ongoing. There is a real risk that industrial and recreational land users could accelerate developments in key areas to get ahead of any further restrictions and/or incidentally damage habitats while the studies are ongoing.This further supports our assertion that the entire area be designated as Critical Habitat. The Plan also lacks detail as to how the results of these studies will be incorporated into the Action Plan.

We recognize the importance of recreational angling in connecting people to trout and their habitats, as well as raising awareness and concern for threats to native trout. The education and outreach programs will be key to continuing this connection and awareness. We also encourage inclusion of studies of the effects of catch and release angling on WSCT populations.

Recommendations

Overall this draft plan provides good guidance for the final recovery strategy and action plan; however without stronger designation of Critical Habitat and activities within Critical Habitat the plan does not fully address key issues for WSCT.. There are some key considerations that we outline here that should be incorporated into the final document to make it truly effective on-the-ground. Specific recommendations that should be included are:

Definition of Critical Habitat

- Maintain inclusion of near-pure populations and upstream habitats in definition of Critical Habitat;
- At minimum, designate the entire area identified in appendix D of the draft plan as "areas in which Critical Habitat can be found" as Critical Habitat;
- Use the bounding box approach to identify priority areas for expansion habitat within the overall Critical Habitat, not as the definition of Critical Habitat;
- Include areas of climate refugia in Critical Habitat definition;
- Include a minimum 100 m riparian buffer from the high-water mark in Critical Habitat designation, as well as conduct further research on riparian buffer widths;
- Include groundwater source areas in Critical Habitat designation;
- Reinstate Blairmore and Allison creeks as designated Critical Habitat;
- Maintain transparency by including additional information and scientific justification for why six creeks were removed from Critical Habitat designation.

Lack of Clarity on Assessment, Monitoring and Enforcement in Recovery Measures

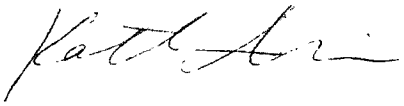
- Define evaluation criteria for permitted or prohibited activities within Critical Habitat and clearly state that decisions will be made using the precautionary principle;
- Include existing anthropogenic structures in evaluation and mitigation of impacts;
- Include details on how recovery measures will protect habitat and reduce human footprint.

Lack of Clarity on Further Studies

- Include details on timing, priority, and responsibility of the recommended studies;
- Include a clear program to manage the entire "area in which Critical Habitat can be found" (the area CPAWS recommends as Critical Habitat) while studies are ongoing to minimize potential activities and impacts;
- Include studies on the effects of recreational angling on native trout populations.

Thank you for taking these recommendations into account. We look forward to seeing our concerns addressed in the final plan.

Sincerely,



Katie Morrison, Conservation Director
CPAWS Southern Alberta

Cc:
Honourable Catherine McKenna, Minister of Environment and Climate Change, ec.ministre-minister.ec@canada.ca
Honourable Jonathan Wilkinson, Minister of Fisheries, Oceans and the Canadian Coast Guard, min@dfo-mpo.gc.ca
Honourable Jason Nixon, Minister of Alberta Environment and Parks, aep.minister@gov.ab.ca
Paul Christensen, Senior Fisheries Biologist South Saskatchewan Region, Alberta Environment and Parks, paul.christensen@gov.ab.ca
Rob Simieritsch, Regional Resource Manager South Saskatchewan Region, Alberta Environment and Parks, rob.simieritsch@gov.ab.ca

Boulanger, Chantel

From:	Jermyn, Olivia
Sent:	Wednesday, July 10, 2019 11:04 AM
To:	Stewart, Julie
Cc:	Valerio, Michael; Saunders, Adam; Mclarens, Scott; Kapi, Nancita; RDGO CNA / CNA BDGR (DFO/MPO)
Subject:	FOR INFO: 2019-001-01751 Re: Recovery Strategy and Action Plan for Alberta Trout
Attachments:	MECTS-#4073716-v1-Main_Docs_2019-001-01751.PDF

Docket No.: 2019-001-01751
Subject: Correspondence from the Canadian Parks and Wilderness Society (CPAWS) regarding Southern Alberta comments on the draft Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout.
Addressed to: SARA
Correspondent: Katie Morrison

Attached is correspondence addressed to your department. The Ministerial Correspondence Unit (MCU) has assessed that a reply is not necessary and will not take any further action.

This INFO docket is being sent to you for your information only; please distribute as appropriate to others within DFO who may have an interest in the issue(s) raised in the correspondence.

NOTE: If you disagree with MCU's assessment and believe that a reply is required, then please advise MCU as soon as possible at the contact information below.

Olivia Jermyn

Analyst, Ministerial Correspondence Unit
Fisheries and Oceans Canada / Government of Canada
Olivia.Jermyn@dfo-mpo.gc.ca / Tel. : 613-990-9954

Analyste, Unité de la correspondance
Pêches et Océans Canada / Gouvernement du Canada
Olivia.Jermyn@dfo-mpo.gc.ca / Tél. : 613-990-9954

MCU Analysts/Analystes: **XNCR-GrpCA/AC@dfo-mpo.gc.ca**
MCU Writers/Rédacteurs: **XNCR-GrpCW/RC@dfo-mpo.gc.ca**

Pages 14 to / à 20

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pages 6 to / à 12

Ms. Joanna Skrajny
Conservation Specialist
Alberta Wilderness Association
455-12 Street NW
Calgary AB T2N 1Y9

Dear Ms. Skrajny:

I am writing in response to your correspondence of July 10, 2019, regarding Canada's recovery strategy and action plan for the Alberta Population of Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*).

Your comments have been forwarded to the Integrated Species at Risk (SARA) team for consideration.

Thank you for writing to the Government of Canada.

Yours sincerely,

Manager
Ministerial Correspondence Unit
Fisheries and Oceans Canada
200 Kent Street / Ottawa ON, K1A 0E6
min@dfo-mpo.gc.ca / Tel: 613-992-3474 / Fax: 613-990-7292

c.c. SARA.XPAC@dfo-mpo.gc.ca.

Ministerial Correspondence / Correspondance ministérielle
Approval Form / Formulaire d'approbation

MCU DOCKET # / N° DU DOSSIER UCM : 2019-001-01762	MCU CONTACT / RESPONSABLE À L'UCM : STEPHANIE DONG A/TEAM LEAD : SM
REPLY BY MINO / RÉPONSE DU MINISTRE	

DATE AND DEADLINES / DATE ET ÉCHÉANCE

DUE DATE TO MINO / ÉCHÉANCE AU CM : (mm-dd-yyyy / mm-jj-aaaa)	8/15/2019	DATE RECEIVED IN MCU / DATE DE RÉCEPTION À L'UCM : (mm-dd-yyyy / mm-jj-aaaa)	7/10/2019

COMMENTS / APPROACH – COMMENTAIRES / APPROCHE

Information sent to SARA for consultation. Reponse to be sent by MCU.

To be sent electronically.

APPROVALS / APPROBATIONS

Level / Niveau	Name, Title and Sector / Nom, titre et secteur	Assigned Date / Date fixée	Date Due / Échéance	Date Approved / Date d'approbation	Changes / Modifications
Director / Directeur(trice)					
DG Regional Director / Directeur(trice) régional(e)					
IF NECESSARY / SI NÉCESSAIRE					
ADM / RDG / DC / CO / AC SMA / DGR / SA / BC / CA					
Indigenous Affairs / Affaires autochtones Legal / Services juridiques IGA / AI					
IF / SI PROVINCIAL / TERRITORIAL					
DM / SM					
PCO / BCP					

OTHER CONSULTATIONS / AUTRES CONSULTATIONS

INFO COPIES TO / COPIES POUR INFORMATION À (Office, Branch, Date / Bureau, direction, date)	DEVELOPED WITH SME(S) OR OTHER STAKEHOLDER(S) / ÉLABORÉ AVEC EXPERT(S) EN LA MATIÈRE OU AUTRE(S) INTERVENANT(S) (Name, Title, Branch, Date / Nom, titre, direction, date)
•	• SARA.XPAC@dfo-mpo.gc.ca.
OGD / AMG - (Name, Title, Branch, Date / Nom, titre, direction, date)	
•	

FOR MCU USE / RÉSERVÉ À L'UCM

b.c.c. / Cci – (Name, Department / Nom, ministère)	c.c. – (Name, email address / contact info / Nom, courriel, coordonnées)
•	•
ATTACHMENTS TO RESPONSE / PIÈCES JOINTES À LA RÉPONSE	
•	

Please reply electronically to : jskrajny@abwild.ca

Boulanger, Chantel

From: Dong, Stephanie
Sent: Wednesday, July 10, 2019 3:12 PM
To: Hogan, Kristina S
Cc: Hoggarth, Thomas
Subject: 2019-001-1762 Skrajny
Attachments: MECTS-#4074184-v1-Draft_Reply_2019-001-01762.DOCX; MECTS-#4074126-v1-Main_Docs_2019-001-01762.PDF

Good afternoon Kristina,

Hope all is well!

Attached please find ministerial correspondence from the Alberta Wilderness Association, providing comments on the Proposed Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout in Canada, and a draft reply.

Please provide input by **July 17.**

If I need to make this inquiry of another sector, please let me know at your earliest convenience.

Thank you so much for your help with this,

Stephanie Dong

Writer/Editor, Ministerial Correspondence Unit
Fisheries and Oceans Canada / Government of Canada
stephanie.dong@dfo-mpo.gc.ca / Tel: 613-296-9176

Rédactrice/ Réviseuse, Unité de la correspondance ministérielle
Pêches et Océans Canada / Gouvernement du Canada
stephanie.dong@dfo-mpo.gc.ca/ Tél. : 613-296-9176

XNCR-GrpCW/RC@dfo-mpo.gc.ca to contact all MCCU Writers / pour rejoindre tous les rédacteurs d'UCCM
XNCR-GrpCA/AC@dfo-mpo.gc.ca to contact all MCCU Analysts / pour rejoindre tous les analystes d'UCCM

Ministerial Correspondence / Correspondance ministérielle Approval Form / Formulaire d'approbation

MCU DOCKET # / N° DU DOSSIER UCM : 2019-001-01762	MCU CONTACT / RESPONSABLE À L'UCM : STEPHANIE DONG A/TEAM LEAD : SM
REPLY BY MINO / RÉPONSE DU MINISTRE	

DATE AND DEADLINES / DATE ET ÉCHÉANCE

DUE DATE TO MINO / ÉCHÉANCE AU CM : (mm-dd-yyyy / mm-jj-aaaa)	8/15/2019	DATE RECEIVED IN MCU / DATE DE RÉCEPTION À L'UCM : (mm-dd-yyyy / mm-jj-aaaa)	7/10/2019

COMMENTS / APPROACH – COMMENTAIRES / APPROCHE

APPROVALS / APPROBATIONS

Level / Niveau	Name, Title and Sector / Nom, titre et secteur	Assigned Date / Date fixée	Date Due / Échéance	Date Approved / Date d'approbation	Changes / Modifications
Director / Directeur(trice)					
DG Regional Director / Directeur(trice) régional(e)	Thomas Hoggarth, Regional Director, Ecosystems Management	July 10, 2019	July 17, 2019		
IF NECESSARY / SI NÉCESSAIRE					
ADM / RDG / DC / CO / AC SMA / DGR / SA / BC / CA					
Indigenous Affairs / Affaires autochtones Legal / Services juridiques IGA / AI					
IF / SI PROVINCIAL / TERRITORIAL					
DM / SM					
PCO / BCP					

OTHER CONSULTATIONS / AUTRES CONSULTATIONS

INFO COPIES TO / COPIES POUR INFORMATION À (Office, Branch, Date / Bureau, direction, date)	**DEVELOPED WITH SME(S) OR OTHER STAKEHOLDER(S) / ÉLABORÉ AVEC EXPERT(S) EN LA MATIÈRE OU AUTRE(S) INTERVENANT(S)** (Name, Title, Branch, Date / Nom, titre, direction, date)
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OGD / AMG - (Name, Title, Branch, Date / Nom, titre, direction, date)	
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FOR MCU USE / RÉSERVÉ À L'UCM

b.c.c. / Cci – (Name, Department / Nom, ministère)	c.c. – (Name, email address / contact info / Nom, courriel, coordonnées)
•	•
ATTACHMENTS TO RESPONSE / PIÈCES JOINTES À LA RÉPONSE	
•	

Ms. Joanna Skrajny
Conservation Specialist
Alberta Wilderness Association
455 - 12 Street NW
Calgary AB T2N 1Y9

Dear Ms. Skrajny:

Thank you for your correspondence of July 10, 2019, regarding Canada's recovery strategy and action plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi). Your recommendations are greatly appreciated.

Please provide input here. Input can be:

- point form, bullet notes;
- source material such as an attachment or a link to briefing notes, informal backgrounders, media lines, QP notes, etc.; and/or
- fully drafted and formatted paragraphs.

Thank you for writing. / Thank you for providing me with your thoughts on this matter. I trust that my response has addressed your concerns. / I regret my response could not be more favourable. / I look forward to continued collaboration …

Yours sincerely,

Jonathan Wilkinson, P.C., M.P.
Minister of Fisheries, Oceans and the Canadian Coast Guard

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page 129

s.19(1)

Boulanger, Chantel

From: [redacted]
Sent: Wednesday, July 10, 2019 6:26 PM
To: Minister / Ministre (DFO/MPO)
Cc: Alberta Wilderness Association
Subject: Westslope Cutthroat Trout

Dear Hon. Jonathan Wilkinson,

According to Alberta Wilderness Association (AWA) communication, Westslope Cutthroat Trout disapeared from over 95% of rivers they used to live in.
This is a huge loss of vital space for a fish and is telling of steep changes in the ecosystems of these rivers, their tributaries and their hydrography in general.

Life of all kind needs to be respected and then nurtured if necessary.

Please help AWA in their wonderful quest to start Westlope Cutthroat Trout recovery process as soon as they can manage. Not only this particular species will benefit by rivers habitat healing but others as well.

Regards,
[redacted]

s.19(1)

Boulanger, Chantel

From: [redacted]
Sent: Thursday, July 11, 2019 5:08 PM
To: Minister / Ministre (DFO/MPO)
Subject: Westslope Cutthroat Trout Action Plan

Honourable Jonathan Wilkinson,

I am concerned that the Department of Fisheries and Ocean's newly released draft Action Plan is lacking in, well, action. Despite being more than 4 years late, the document is sorely lacking in details, concrete on-the-ground actions, and is unambitious in its recovery goals. In fact, the draft plan's new "bounding-box" approach to critical habitat would likely perpetuate habitat destruction.

[redacted] I'd like to encourage you to ensure that DFO's action plan for Westslope Cutthroat Trout is improved, so as to help ensure that the non-stocked populations of this native species continue to survive and recover.

Thanks,
[redacted]

s.19(1)

Kapi, Nancita

From: [redacted]
Sent: Thursday, July 11, 2019 2:02 PM
To: Minister / Ministre (DFO/MPO); NCR SARA / LEP RCN (DFO/MPO)
Cc: Joanna Skrajny, Alberta Wilderness Association
Subject: Cutthroat Trout Action Plan

Dear Minister Wilkinson and SARA directorate,

I am a member of the Alberta Environmental Network and have read recently about the Alberta Wilderness Association's concerns regarding the DFO's draft action plan to protect Alberta's west slope cutthroat trout. I share the AWA's concerns, in particular, the following:

1. Action is required now. The action plan is already four years late, and we need the plan to commit to the immediate protection of the remaining west slope cutthroat trout.

2. Critical habitat. Like the AWA, I do not support the "bounding box" approach as described. These fish need the DFO to permanently protect the "areas in which critical habitat can be found," along with the upland watersheds that sustain them, and they need the creation of an immediate restoration plan for critical habitat.

3. Monitoring and reporting. The DFO must routinely monitor and publicly report on the status of all remaining west slope cutthroat trout populations and complete on-the-ground assessments. However, this point alone is not sufficient and points one and two above need to be undertaken.

It is time for Canada to re-establish the strength of the DFO in protecting vulnerable river and marine species across our country. I look forward to reading a new DFO draft plan for immediate protection and recovery of the west slope cutthroat trout that ensures the future of this important species.

Sincerely,

[redacted]

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:32 AM
To: Watson, Ernest
Subject: FW: AWA Comments on Recovery Strategy and Action Plan for AB Westslope Cutthroat Trout
Attachments: 20190710_lt_awa_dfo_wsct_rsap.pdf

From: Joanna Skrajny
Sent: Wednesday, July 10, 2019 12:05 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>; Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Subject: AWA Comments on Recovery Strategy and Action Plan for AB Westslope Cutthroat Trout

Dear Director and Minister Wilkinson,

Alberta Wilderness Association (AWA) appreciates the opportunity to provide comments (attached) on the proposed *Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada*.
We appreciate your careful review of our submission and look forward to your response.

With regards,
Joanna Skrajny
Conservation Specialist
Alberta Wilderness Association

"Defending Wild Alberta through Awareness and Action"

455-12 St NW Calgary, AB T2N 1Y9
403.283.2025 www.AlbertaWilderness.ca

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pages 130 to / à 135

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:33 AM
To: Watson, Ernest
Subject: FW: Cutthroat Trout

From: [redacted]
Sent: Wednesday, July 10, 2019 5:44 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>; Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Subject: Cutthroat Trout

Dear SARA Secretariat and Jonathan Wilkinson:

2-3. Population and Distribution Objectives, Strategies and Recovery Actions

As currently written, the RS-AP is continuing to perpetuate a "plan to plan" by committing only to continued information gathering and planning. Work on updating genetic information and identifying work priorities has been ongoing for at least the past 2-3 years. Including these items as the primary focus of this plan, especially given that this plan is more than 4 years overdue is unacceptable. Information gathering, while important, will not recover or prevent the further decline of westslope cutthroat trout. Action is required now.

The RS-AP must identify where work is to occur within discrete time increments (such as 5 year periods) and what will need to occur in order to successfully recover westslope cutthroat trout, beginning with those populations where recovery work is most needed.

Concrete actions and quantifiable recovery targets, including the following, should be the focus of the RS-AP:

Short Term (Years 1-5):

Develop and implement a monitoring plan: As it currently stands, monitoring of westslope cutthroat trout is occurring on an ad-hoc and infrequent basis. As a result, the status of each population is unknown and declines are not being detected. At a bare minimum, the RS-AP must contain a plan and the funding to routinely monitor and report on the status of all remaining westslope cutthroat trout The abundance, distribution and genetic integrity of each population must be determined on a routine basis. Monitoring should be robust enough so that any trends detected will be statistically sound, and results should be publicly available.
Rescue/recover the most vulnerable populations: The RS-AP must plan to immediately begin recovery of the most vulnerable remaining populations of westslope cutthroat trout, such as those exposed to high angling pressures or under risk of hybridization. In particular, how will Fisheries and Oceans Canada (DFO) protect and recover the last remaining fluvial populations of westslope cutthroat trout, such as the ones in the Upper Oldman/Livingstone and in the Castle?
Expand and enforce protections: An expansion of critical habitat is necessary in order to achieve recovery of westslope cutthroat trout (see critical habitat, below). However, this expansion of critical habitat must be more than symbolic. DFO must halt any activities with the potential to negatively impact westslope cutthroat trout habitat and abundance. An increase in enforcement capacity in order to ensure westslope cutthroat trout are actually protected is required.

Complete on-the-ground assessments of all habitat and prioritize areas for habitat restoration: Once a habitat restoration plan is completed, recovery work can be aided by NGO partners.
Stabilize all remaining westslope cutthroat trout populations: Until more extensive recovery actions can be undertaken, DFO must stop the further decline of the distribution and abundance of all remaining populations.
Mid Term (Years 5-10): Complete the recovery of at least 10 populations across the species' range

Long Term (30 years): Achieve the recovery of westslope cutthroat trout

In addition, the following pieces of information must be included within the RS-AP:

What does DFO consider to be a "population"? Where are remaining populations located and what is their current status?
What are the main threats currently facing each population? What actions must be undertaken in order to address them?
What is the desired final distribution, number of adult individuals, and genetic status of each population when recovered?
Where will westslope cutthroat trout be re-introduced and expanded, and from what population?
Clear, scientifically defensible definitions of "core", "conservation" and "self-sustaining" are required
A feedback mechanism is required by which recovery work is monitored and reported upon and successes/failures are used to improve future recovery actions.
Westslope cutthroat trout cannot sustain further habitat degradation; the populations that remain live in fragmented and isolated areas that are often already highly disturbed. AWA believes that permanent protection must be afforded to the water bodies identified within Appendix D, along with the upland areas that sustain them:

Instream Habitat: We support the expansion of instream critical habitat and the inclusion of unnamed tributaries within those stream segments. These tributaries must include both ephemeral and permanent (mapped and unmapped) water bodies that feed water into westslope cutthroat trout streams. As with land uses adjacent to critical habitat, anything that occurs upstream of critical habitat impacts downstream ecosystems and may destroy critical habitat if improperly protected. In addition, AWA is concerned with the inconsistent approach with which the instream sections of critical habitat have been identified. Some near-pure populations of westslope cutthroat trout have been omitted. If AEP's Genetic Delineation product was the basis for critical habitat identification, then that information must be published as well as an explanation of how it was used.
Riparian areas are necessary to the survival and recovery of westslope cutthroat trout, and we support the addition of riparian areas to critical habitat. Most of the instream attributes outlined in the proposed Recovery Strategy as essential parts of westslope cutthroat trout critical habitat – clean cold water, sediment/silt-free gravel substrate, large woody debris – depend entirely on healthy riparian habitat function. Westslope cutthroat trout are particularly sensitive to riparian habitat. The current degraded quality of riparian vegetation adjacent to instream habitats has resulted in decreased quality of westslope cutthroat trout habitat and has likely compromised their persistence. Restoration of degraded riparian areas should be a key action recommended within the RS-AP.
Using an arbitrary number (such as 100m) is insufficient and that at minimum the entire floodplain – which, by definition encompasses the riparian area – must be included as the riparian portion of westslope cutthroat trout critical habitat. We strongly disagree with the RS-AP's assertion that a 30m riparian buffer is a "reasonable" approach. More protective measures are already being used in practice in many instances and yet westslope cutthroat trout remain in jeopardy. For example, as the primary industrial-scale logging company within westslope cutthroat trout critical habitat, Spray Lake Sawmills is already required to treat any water body where westslope cutthroat trout are found as Class 'A' (not permitted within 100m of the high water mark) as part of its Operating Ground Rules. In addition, under the Livingstone-Porcupine Land Footprint Management Plan, motorized access within 100m of streams has been severely restricted due to the provincial government's recognition of the impacts of riparian disturbance on trout populations.

An integral part of a river is the shallow connected groundwater in the floodplain beyond its active channel. Gravel-bed river floodplains are critical for healthy and functioning ecosystems, where water can travel hundreds of meters out from the river channel. These saturated underground gravels deliver cold, oxygen-rich water to the river system year-round, which is critical for the survival and recovery of native fishes, supports an abundance of vegetation and is relied upon by bird species[1].

Due to the interconnectedness of the floodplain and visible river channel, streams and rivers are constantly moving and shifting, which can affect the habitat quality of westslope cutthroat trout. If a stream has a 100m buffer between the flowing water and industrial activities or roads, but during a flooding event the waterbody shifts 60-70 metres, only a very small vegetation buffer is left to prevent erosion and sedimentation, and this causes key threats to trout survival. Natural channel meandering is important for the health of aquatic ecosystems and this only occurs if the flood plain is protected from vegetation loss. Therefore, the entire floodplain must be included as critical habitat for westslope cutthroat trout to accommodate movements in the stream channel and ensure critical habitat remains sufficient for the recovery of this species and their long term survival.

As with activities that occur within the floodplain, upstream activities such as industrial scale logging and linear disturbances can impact downstream water quality and adversely affect remaining westslope cutthroat trout populations, as well as prevent successful re-establishment in candidate streams. I implore the DFO to consider the inclusion of the entire watershed as westslope cutthroat trout critical habitat, particularly for the remaining fluvial populations.

Groundwater: Groundwater is important for stream flow regulation (maintaining stream flows within the range of natural variability), reducing water temperature fluctuations, and ensuring sediment loads to receiving streams are minimized. The interaction between ground water and surface water creates a more stable quantity of water flowing downstream by acting as an underground sponge during flooding and ensuring continual flow during periods of drought. For a species like westslope cutthroat trout that relies on shallow headwater streams, this stability is essential.

Groundwater quantity and quality is also crucial for the wintering habitat of stream dwelling salmonids including westslope cutthroat trout. Winter flows can diminish to levels that essentially trap fish in deeper pools between the frozen riffles along streams. Clean, oxygenated groundwater influx acts as a recharge mechanism to ensure sufficient freshwater habitat for westslope cutthroat trout over winter months. Thus we strongly recommend that the critical habitat identification for westslope cutthroat trout includes any and all areas within the watershed responsible for groundwater storage and recharge regardless of distance from a watercourse.

The Species at Risk Act does not permit the inclusion of socio-economic impacts as part of the assessment of critical habitat. We see no biological reason to adopt the bounding box approach and exclude these important and well known landscape elements that AWA has listed above from the critical habitat identification of westslope cutthroat trout.

The protection of fisheries requires the ongoing maintenance of freshwater and riparian ecosystem health. There needs to be an emphasis on watershed management as a function of critical habitat and westslope cutthroat trout need to be managed as one ecological unit in a dynamic environment for a successful recovery. Riparian buffers, active floodplain areas, areas necessary for groundwater storage, historically occupied capable/restorable habitat and upstream tributaries must be included as critical habitat for westslope cutthroat trout.

3.2 Actions already completed or underway

Currently, Fisheries and Oceans Canada has failed to report on steps made to protect westslope cutthroat trout

critical habitat and the effectiveness of recovery measures. Even basic information such as the status and health of each remaining population and actions to be undertaken in the coming fiscal year, are not published. What is the trend in westslope cutthroat trout distribution and abundance since the publication of the first Recovery Strategy? What populations have had recovery work completed and what were the impacts on population abundance and distribution? Without basic checks and balances, westslope cutthroat trout can and will be mismanaged into non-existence.

4.3 Activities likely to result in the destruction of critical habitat
Given the imperiled status of westslope cutthroat trout, AWA believes that a more precautionary approach to the protection of critical habitat is warranted. As currently written, the RS-AP purposefully omits pollution, grazing and forest harvest as having the potential to destroy critical habitat. It is the cumulative impact off all activities – both large and small – that have driven population declines of westslope cutthroat trout. Cherry picking which activities will be considered as potentially damaging is unacceptable, especially given DFO's recognition that "knowledge of [...] critical habitat's thresholds of tolerance to disturbance from human activities is lacking".

7 Activities permitted by the RS-AP
Given that incidental mortality from catch and release angling may be a threat to the survival and recovery of westslope cutthroat trout in some watersheds, DFO may need to reconsider its blanket approval of this activity, at least within areas identified as critical habitat.

Without a comprehensive action plan, AWA believes that individual WSCT populations will be driven to extinction, with grave consequences for recovering the species in Alberta. We thank you for your serious consideration of these comments and look forward to seeing these recommendations incorporated into the final Recovery Strategy – Action Plan for the Alberta population of westslope cutthroat trout.

Sincerely,

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:35 AM
To: Watson, Ernest
Subject: FW: It's Time - Let's Defend our Westslope Trout

From: [redacted]
Sent: Wednesday, July 10, 2019 10:57 PM
To: Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Cc: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Subject: It's Time - Let's Defend our Westslope Trout

To:
Honourable Minister Jonathan Wilson, Department of Fisheries and Oceans

Dear Mr. Wilson,

I am concerned that not nearly enough is planned for the recovery of the Westslope Trout.

Action is required now. The plan must commit to the immediate recovery of the most vulnerable remaining populations of westslope cutthroat trout

Critical Habitat: I do not support the bounding box approach as described. These fish need DFO to permanently protect the "areas in which Critical Habitat can be found", along with the upland watersheds that sustain them.

Monitoring and Reporting: DFO must routinely monitor and report on the status of all remaining westslope cutthroat trout populations, complete on-the-ground assessments, and create an immediate restoration plan for critical habitat.

Please let me know how you will be addressing this important issue.

Sincerely,

[redacted]

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:35 AM
To: Watson, Ernest
Subject: FW: LACK of action plan for Westslope Cutthroat

From: [redacted]
Sent: Thursday, July 11, 2019 10:46 AM
To: Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Cc: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Subject: LACK of action plan for Westslope Cutthroat

11 July 2019

The Honourable Jonathan Wilkinson
Minister, Department of Fisheries and Oceans Canada
min@dfo-mpo.gc.ca

Subject: Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout in Canada

Dear Hon. Wilkinson,

I am very concerned with the lack of action to protect Westslope Cutthroat Trout. The recovery strategy does not provide an effective program of actions to protect the trout populations. Planing and reports do not help the trout and their habitat. The destruction of the streams continues every day, every weekend.

Your department should immediately declare critical habitat in the east slopes of Alberta. The damage by industry and Off-highway vehicles to Alberta's streams and consequently to the trout populations continues.

The current Alberta government is about to open more watersheds to more abuse by ATVs which have been shown to repeatedly ignore stream crossing restrictions. The time for federal action has been long overdue. Please tell me when you will declare critical habitat for this endangered species of trout.

Respectfully

[redacted]

Cc: Director, SARA Directorate
Department of Fisheries and Oceans Canada
SARA/LEP.XNCR@dfo-mpo.gc.ca

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:37 AM
To: Watson, Ernest
Subject: FW: Response to draft report on cutthroat trout

-----Original Message-----
From [redacted]
Sent: Thursday, July 11, 2019 8:31 PM
To: Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>; NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Skrajny Joanna [redacted]
Subject: Response to draft report on cutthroat trout

SARA Directorate
Hon. Jonathan Wilkinson

I have reviewed the DFO's draft report on Cutthroat Trout on our Eastern Slopes with particular attention to the executive summary. I have also read carefully the response by the AWA to this report. I write this letter to express my complete support for the positions the AWA has taken on these issues. This endangered and critically important species should warrant immediate and effective protective and remedial action. I hasten to add that the appropriate action would also be a small but significant step in the protection of our fresh water supply, which is ultimately of much greater importance to all of us.

[redacted]

cc Joanna Skrajny, AWA Conservation Specialist

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:36 AM
To: Watson, Ernest
Subject: FW: Westslope Cutthroat Trout Recovery Plan is inadequate

From: [redacted]
Sent: Thursday, July 11, 2019 1:28 PM
To: Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>; NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: [redacted]
Subject: Westslope Cutthroat Trout Recovery Plan is inadequate

Director

SARA Directorate

Department of Fisheries and Oceans Canada

SARA.LEP.XNCR@dfo-mpo.gc.ca

The Honourable Jonathan Wilkinson

Minister, Department of Fisheries and Oceans Canada

min@dfo-mpo.gc.ca

Re Cutthroat Trout Recovery Plan:

I am writing to express my relief that there is finally a recovery plan for Westslope Cutthroat Trout. This is long overdue. It is, however, inadequate to the task of recovering this species. There have been decades of habitat degradation and destruction occurring in the range of this species and their current precarious plight is a result of these activities.

I have spent a number of decades [redacted] in the range of Westslope Cutthroat Trout and have seen numerous examples of industrial and motorized recreational activity damaging streams that contain Westslope Cutthroat Trout. I have seen logging cuts, oil and gas exploration and service roads, mines and ATV trails all dump sediment into Westslope Cutthroat Trout streams during the spawning period. These sediment releases were all from activities that would be still allowed under the recovery plan. To stop the decline of this species these activities must be stopped or curtailed further and monitored closely in the watersheds where these fish live and breed.

The recovery plan as it stands now will not be sufficient stop the decline of this species. I hope that you will revise this plan immediately to protect the full habitat of this species, which is the watershed, not just the streams.

Yours truly,

[redacted]

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:36 AM
To: Watson, Ernest
Subject: FW: Westslope Cutthroat Trout

From: [redacted]
Sent: Thursday, July 11, 2019 10:58 AM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Subject: Fwd: Westslope Cutthroat Trout

Begin forwarded message:

From: [redacted]
Date: July 10, 2019 at 17:11:38 MDT
To: min@dfo-mpo.gc.ca, SARA/LEPXNCR@dfo-mpo.gc.ca
Subject: Westslope Cutthroat Trout

Dear Hon. Jonathan Wilkinson & SARA Directorate,

I am writing to request that operational details be provided so that the public can be assured and real action will be taken to protect our Cutthroat fish and our waters.

- Alberta and Canada's fish need you to permanently protect the "areas in which Critical Habitat can be found", along with the watersheds that sustain them.
- Monitoring and reporting on the status of remaining westslope cutthroat trout populations, with complete on-the-ground assessments are important. We need a restoration plan that is well operationalized and clear.

Thanks
[redacted]

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:33 AM
To: Watson, Ernest
Subject: FW: Comments on proposed Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada.
Attachments: Response to DFO WSCT Recovery plan.docx

From: [redacted]
Sent: Wednesday, July 10, 2019 7:20 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>; Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Subject: Comments on proposed Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada.

Please find , attached, my comments on the proposed *Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada.*

[redacted]

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are duplicates of
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pages 58 to / à 59

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Friday, July 12, 2019 6:38 AM
To: Watson, Ernest
Subject: FW: Westslope cutthroat trout

From: [redacted]
Sent: Friday, July 12, 2019 1:59 AM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Subject: Westslope cutthroat trout

To whom it may concern,

I recently learned of the federal government's release of its draft plan to recover westslope cutthroat trout in Alberta. By expanding the designation of their critical habitat to include upstream creek channels and riparian areas, this document recognizes and strengthens protection of this important species of Alberta trout; I applaud this measure. Sadly, however, after a four-year delay of this new plan, business as usual has degraded existing habitat and trout populations have predictably suffered. Now that we've lost time and ground in this important battle to preserve valuable parts and populations of the natural world, it is all the more important that we bolster our efforts by looking at the whole catchment area of the watershed, and by accepting science-based population targets for recovery of the species.

I urge the federal Government to preserve and enhance our westslope cutthroat trout populations with a robust and credible plan. Relying mainly on a bounding box approach doesn't cut it. Like the realtor's advice saying "Location, location, location" the most important species protection strategy is to protect habitat, habitat, habitat.

Sincerely yours,

[redacted]

s.19(1)

Boulanger, Chantel

From: Jermyn, Olivia
Sent: Friday, July 12, 2019 10:13 AM
To: RDGO CNA / CNA BDGR (DFO/MPO); Kapi, Nancita; DFO.F FHM ADM Correspondance / Correspondance SMA GPP F.MPO
Cc: Valerio, Michael; Saunders, Adam; Mclarens, Scott
Subject: FOR INFO: 2019-001-01782 Re: Alberta Trout Recovery Strategy
Attachments: MECTS-#4074628-v1-Main_Docs_2019-001-01782.PDF

Docket No.: 2019-001-01782
Subject: Comments on the proposed Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout in Canada.
Addressed to: Minister Wilkinson
Correspondent: [redacted]

Attached is correspondence addressed to the Minister. The Ministerial Correspondence Unit (MCU) has assessed that a reply from the Minister is not necessary and will not take any further action.

This INFO docket is being sent to you for your information only; please distribute as appropriate to others within DFO who may have an interest in the issue(s) raised in the correspondence.

NOTE: If you disagree with MCU's assessment and believe that a reply is required, then please advise MCU as soon as possible at the contact information below.

Olivia Jermyn

Analyst, Ministerial Correspondence Unit
Fisheries and Oceans Canada / Government of Canada
Olivia.Jermyn@dfo-mpo.gc.ca / Tel. : 613-990-9954

Analyste, Unité de la correspondance
Pêches et Océans Canada / Gouvernement du Canada
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MCU Analysts/Analystes: **XNCR-GrpCA/AC@dfo-mpo.gc.ca**
MCU Writers/Rédacteurs: **XNCR-GrpCW/RC@dfo-mpo.gc.ca**

s.19(1)

Jermyn, Olivia

2019-001-01782

From: [redacted]
Sent: Wednesday, July 10, 2019 7:20 PM
To: NCR SARA / LEP RCN (DFO/MPO); Minister / Ministre (DFO/MPO)
Subject: Comments on proposed Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada.
Attachments: Response to DFO WSCT Recovery plan.docx

Categories: For Info

Please find , attached, my comments on the proposed *Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada.*

[redacted]

Director

SARA Directorate

Department of Fisheries and Oceans Canada

SARA.LEP.XNCR@dfo-mpo.gc.ca

The Honourable Jonathan Wilkinson

Minister, Department of Fisheries and Oceans Canada

min@dfo-mpo.gc.ca

July 10/19

Comments on Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) in Canada

Dear Director,

Having sat on the initial Westslope Cutthroat trout recovery plan it is disappointing to see the present, **proposed *Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada* seems neither to meet the reasonable expectations of recovery of this species, or a concrete, substantive plan on how recovery is to be effected. The proposed plan is couched in language that, at best, is uncertain and, often is unclear. With so much time now slipped away on developing a plan to recover a threatened species, one might have hoped for something more definitive, clear and filled with action statements. Specifically, here are some ways to improve this recovery plan:**

1. **Define the targets for population recovery. Where are we now (current status) and where do we need to be by a certain date, to ensure populations do not "wink" out of existence.**
2. **Create actions that will ensure population recovery occurs, occurs in a timely fashion and does not devolve into more data acquisition, as an excuse for inaction. Define clear timelines for recovery actions.**
3. **Define responsibilities of the Federal and provincial governments clearly and provide a sense of how the conservation community can play an active role.**
4. **Define "critical habitats" by recognizing these occur on a watershed basis, and not in discrete "bounding units". Ensure buffer zones include the entire riparian area, not the insufficient 30m buffer suggested. Recognize**

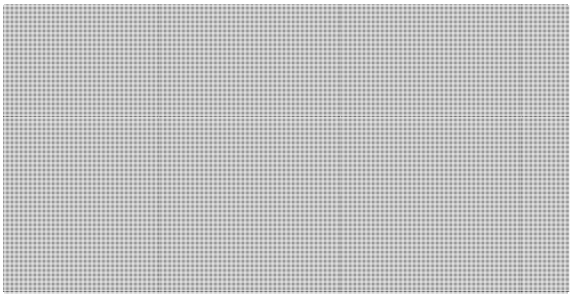
the importance of groundwater in the ecology of cutthroat trout and the measures required to protect source water from inappropriate land uses.

5. Use the "precautionary principle" when data is insufficient for precision.
6. Recognize the impact of angling, even incidental mortality from catch and release. Angling pressure on many watersheds containing cutthroat trout may, at this point, be too high to allow population recovery.
7. Define, in clear terms, a monitoring plan, with time steps to allow an assessment of progress towards population recovery.

My fear is that the plan, as proposed, merely delays the inevitable demise of the species in many watersheds. Westslope cutthroat trout need a dynamic, action-oriented, science-based approach to allow recovery, not a series of mumbles, half-hearted and weak responses, plus years of inaction.

Please ensure there is a timely revision of the proposed recovery plan and work that begins this year to ensure the population is saved.

My regards,



Boulanger, Chantel

From: Wilkinson, Jonathan - M.P. <Jonathan.Wilkinson@parl.gc.ca>
Sent: Friday, July 12, 2019 12:21 PM
To: Minister / Ministre (DFO/MPO)
Cc: Mitchell, Laura; Hill, Johanna; Simons, Fiona
Subject: FW: Report on the Implementation of the Recovery Strategy under the Species at Risk Act for the Alberta population of Westslope Cutthroat Trout
Attachments: Timberwolf Demand for Report on RS implementation (July 12, 2019).pdf

From: Drew Yewchuk [mailto:
Sent: July 12, 2019 9:18 AM
To: Wilkinson, Jonathan - M.P.; min@dfo-mpo.gc.ca
Cc: mcu@justice.gc.ca; fwisar@dfo-mpo.gc.ca
Subject: Re: Report on the Implementation of the Recovery Strategy under the Species at Risk Act for the Alberta population of Westslope Cutthroat Trout

Good Morning,

Please find attached a PDF of a letter demanding the Minister of Fisheries and Oceans release a Report on the Progress of Recovery Document Implementation for the Alberta population of Westslope Cutthroat Trout, as required by section 46 of the *Species at Risk Act*. A paper version will be mailed to the Minister today.

Drew Yewchuk
Staff Lawyer
Public Interest Law Clinic
University of Calgary
403-220-6733

s.19(1)

UNIVERSITY OF CALGARY

PUBLIC INTEREST LAW CLINIC
FACULTY OF LAW

MURRAY FRASER HALL, Room 3310
2500 University Drive NW
Calgary, AB, Canada T2N 1N4
Telephone: (403) 220-6733
E-mail: [redacted]

July 12, 2019

The Honourable Jonathan Wilkinson
Minister of Fisheries and Oceans and the Canadian Coastguard
Min@dfo-mpo.gc.ca
Jonathan.Wilkinson@parl.gc.ca

The Honourable David Lametti
Minister of Justice and Attorney General of Canada
David.Lametti@parl.gc.ca

SARA Directorate
Department of Fisheries and Oceans
fwisar@dfo-mpo.gc.ca

Re: Report on the Implementation of the Recovery Strategy under the *Species at Risk Act* (Canada) for the Alberta population of Westslope Cutthroat Trout.

I am legal counsel for the Timberwolf Wilderness Society (hereafter "The Petitioner") in respect of this matter. The Petitioner is interested in and greatly concerned about the survival and recovery of the Alberta population of Westslope Cutthroat Trout.

Section 46 of the *Species At Risk Act*, SC 2002 c 29 [*SARA*] requires the competent Minister to report on the implementation of the recovery strategy, and the progress towards meeting its objectives, within five years after the recovery strategy is included in the public registry. The Recovery Strategy for the Alberta population of Westslope Cutthroat Trout was posted to the Species at Risk Registry on March 28, 2014. This sets March 28, 2019 as the deadline for the report on the implementation of the recovery strategy.

The Petitioners have previously written to the Minister about the urgent situation of the Westslope Cutthroat Trout, and are insistent that compliance with each statutory requirement of *SARA* is important for the recovery of the species. It is the position of the Petitioner that the Report on the Progress of Recovery Document Implementation ought to include an update to the estimated population of westslope cutthroat trout and their current extinction risk.

The Petitioners are of the view that the Minister has a legal obligation under section 46 of *SARA* to place a Report on the Progress of Recovery Document Implementation for the Alberta population of Westslope Cutthroat Trout on the SARA public registry. The Petitioners hereby demand that the Minister publish such a report by August 9, 2019.

Sincerely,

Drew Yewchuk
Public Interest Law Clinic
Staff Lawyer

Kapi, Nancita

From: Dave Mayhood [redacted]
Sent: Friday, July 12, 2019 3:15 PM
To: NCR SARA / LEP RCN (DFO/MPO)
Subject: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Director
SARA Directorate
Department of Fisheries and Oceans
200 Kent St.
Ottawa, ON
K1A 0E6

I have just sent our comments as a 3.6mb pdf report. In the event that it does not reach you, please download the comments here:

https://ln.sync.com/dl/69c601e10/uis7dkrz-bycyx9pe-axuzmnv4-enzd8jgw

David Mayhood MSc, President
FWR Freshwater Research Limited
1213 - 20 Street NW
Calgary, Alberta T2N 2K5
Canada

403 283 8865
[redacted]
https://www.fwresearch.ca
Twitter: @dmayhood
Public key at: http://http-keys.gnupg.net/

Pages 64 to / à 70

are duplicates

sont des duplicatas

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Monday, July 15, 2019 8:07 AM
To: Watson, Ernest
Subject: FW: cut throat trout protection

From: [redacted]
Sent: Sunday, July 14, 2019 11:55 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>; Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Subject: cut throat trout protection

Dear SARA Directorate and Minister of Fisheries,
I am writing to strongly urge you to take action now to protect cutthroat trout and their habitat.

- **Action is required now.** The plan must commit to the immediate recovery of the most vulnerable remaining populations of westslope cutthroat trout.
- **Critical Habitat:** AWA does not support the bounding box approach as described. These fish need DFO to permanently protect the "areas in which Critical Habitat can be found", along with the upland watersheds that sustain them.
- **Monitoring and Reporting:** DFO must routinely monitor and report on the status of all remaining westslope cutthroat trout populations, complete on-the-ground assessments, and create an immediate restoration plan for critical habitat.

Sincerely,
[redacted]

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Monday, July 15, 2019 8:03 AM
To: Watson, Ernest
Subject: FW: Proposed Recovery Strategy and Action Plan for Alberta's Westslope Cutthroat Trout - Y2Y comments
Attachments: Recovery Strategy-Action Plan for Alberta's WSCT - Y2Y comments July 12, 2019.pdf

From: Connie Simmons <
Sent: Friday, July 12, 2019 4:06 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Subject: FW: Proposed Recovery Strategy and Action Plan for Alberta's Westslope Cutthroat Trout - Y2Y comments

From: Connie Simmons
Sent: July 12, 2019 2:02 PM
To: SARA/LEP.WNCR@dfo-mpo.gc.ca; min@dfo-mpo.gc.ca
Cc: Adam Linnard Hilary Young
Subject: Proposed Recovery Strategy and Action Plan for Alberta's Westslope Cutthroat Trout - Y2Y comments

Dear SARA Directorate and Honourable Minister Jonathan Wilkinson,

Thank you for the opportunity to provide comments and suggestions to the Proposed Recovery Strategy and Action Plan for the Alberta population of Westslope Cutthroat Trout (*Oncorhynchus clarkia lewisi)* in Canada. We hope these suggestions for improvement to the recovery strategy and action plan will help to address the urgent need to recover this critical species at risk. We look forward to seeing how these recommendations may be included in the final Recovery Strategy and Action Plan for Alberta's Westslope Cutthroat Trout.

Sincerely,
Connie Simmons

Connie Simmons PhD.
Southwest Alberta Coordinator

Yellowstone to Yukon Conservation Initiative

200-1350 Railway Ave, Canmore, AB, T1W 1P6
Phone: (403) 627-1736 Fax: (403) 609-2667
Email: Web: www.y2y.net
Follow: Twitter | Instagram | Facebook

Yellowstone to Yukon
Conservation Initiative

July 12, 2019

Director
SARA Directorate
Department of Fisheries and Oceans Canada
SARA/LEP.WNCR@dfo-mpo.gc.ca

Honourable Jonathan Wilkinson,
Minister, Department of Fisheries and Oceans Canada

Yellowstone to Yukon Conservation Initiative input to the Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout *(Oncorhynchus clarkia lewisi)* in Canada

Dear SARA Directorate and Honourable Jonathan Wilkinson,

Yellowstone to Yukon Conservation Initiative (Y2Y) has reviewed the proposed Recovery Strategy and Action Plan for the Alberta population of Westslope Cutthroat Trout *(Oncorhynchus clarkii lewisi)* in Canada and appreciates the opportunity to provide comments and suggestions on the proposed plan.

The proposed Recovery Strategy and Action Plan is recognized as an attempt to address the need for recovery of Westslope Cutthroat Trout (WSCT) in Alberta. To accomplish recovery, however, the following actions are needed in the plan and on the ground:

1. Immediate action by DFO to protect and recover the most vulnerable populations of WSCT at risk from angling pressure/mortality and hybridization. While additional assessment of the status of WSCT over time is recognized as necessary, this should not be cause for inaction.
2. A clear definition of the current status of WSCT and specific, measurable targets for population recovery is needed.
3. A timeline for recovery with clear milestones to map progress, and clear definitions of responsibilities to accomplish recovery by both federal and provincial governments is needed.
4. Protection and full recovery of WSCT requires expansion of critical habitat to include habitat streams, the full extent of riparian zones, and upland areas within watersheds. Critical habitat should not be confined to 'bounding units' which limits the ability to address the full extent of habitat destruction or other negative impacts. Restricting riparian area protection to a 30-metre buffer is inadequate to safeguard this important element of WSCT critical habitat.
5. Monitoring of the recovery plan and actions is needed with strong adaptive management actions implemented as required.

Phone: 403.609.2666
Fax: 403.609.2667
Toll-free: 1.800.966.7920

Unit 200, 1240 Railway Ave
Canmore, AB T1W 1P4
Canada

P.O. Box 157
Bozeman, MT 59771-0157
USA

www.y2y.net
info@y2y.net

Yellowstone to Yukon
Conservation Initiative

6. Habitat restoration and expansion is needed. Re-founding WSCT in areas that are suitable to expand the range of the species will be required to ensure the persistence of the species.

7. Include NGOs in the work of WSCT restoration and re-founding critical habitat for the species.

8. The Precautionary Principle should be enacted when there is not enough information to make sound decisions – err on the side of caution.

The remnant populations of Westslope Cutthroat Trout in Alberta are at grave risk of winking out entirely and urgently need recovery action. To add to the current issues that face the recovery and persistence of WSCT, research on climate change impacts on WSCT habitat streams throughout the Crown of the Continent have shown the critical necessity of safeguarding Alberta's higher altitude, clean, cold connected headwaters streams for the persistence of the species in the Crown region in the face of climate change.

Thank you for accepting these comments in the spirit of advancing the best plan possible for the future of Alberta's Westslope Cutthroat Trout. We look forward to seeing strong, meaningful action on the ground.

Sincerely,

Connie Simmons PhD.
Southwest Alberta Coordinator
Yellowstone to Yukon Conservation Initiative

Phone: 403.609.2666
Fax: 403.609.2667
Toll-free: 1.800.966.7920

Unit 200, 1240 Railway Ave
Canmore, AB T1W 1P4
Canada

P.O. Box 157
Bozeman, MT 59771-0157
USA

www.y2y.net
info@y2y.net

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Monday, July 15, 2019 8:03 AM
To: Watson, Ernest
Subject: FW: Proposed Recovery Strategy and Action plan for WSCT in AB
Attachments: TUC letter to DFO RE_WSCT RS-AP_July2019.pdf

From: Lesley Peterson [redacted]
Sent: Friday, July 12, 2019 4:38 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Subject: Proposed Recovery Strategy and Action plan for WSCT in AB

Hello,
Thank you for the opportunity to provide feedback on the proposed Recovery Strategy and Action Plan for the Alberta populations of Westslope Cutthroat Trout in Canada. Please see the attached letter from Trout Unlimited Canada with our comments on the plan.

We look forward to hearing from you.

Best regards,
Lesley
--

DONATE/JOIN

Lesley Peterson
Alberta Provincial Biologist
Trout Unlimited Canada

1-800-909-6040 or 403-221-8360
403-875-3264
[redacted]
www.tucanada.org

July 12, 2019

Director, SARA
Department of Fisheries and Oceans
200 Kent St.
Ottawa, ON K1A 0E6

RE: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout in Canada

Dear Director,

Thank you for the opportunity to provide feedback on the proposed Recovery Strategy and Action Plan (RS-AP) for the Alberta Populations of Westslope Cutthroat Trout in Canada. Trout Unlimited Canada (TUC) is generally supportive of the objectives and strategies in the RS-AP and urge immediate implementation of recovery actions.

Please accept the following comments on the proposed plan:

- TUC is supportive of the expanded description of critical habitat to include riparian areas and upstream reaches. This better recognizes the inter-connectedness between aquatic and terrestrial habitat components and the value of these contributing areas. The conditions and processes found within the watershed and stream corridors create and support the habitat attributes important to Westslope Cutthroat Trout. This includes the interplay between groundwater, surface water, riparian structure and connectivity within the watershed.
- Genetic tools continue to advance, allowing for a better understanding of pure, near pure, and hybrid populations. TUC supports the use of the best available science to inform recovery planning and recovery action. In addition, we support the inclusion of areas with near-pure populations as critical habitat. As stated in the proposed RS-AP, "maintaining current reaches of genetically pure Westslope Cutthroat Trout will likely be insufficient to ensure viable populations in the long-term". As such, it is absolutely essential that recovery habitats and populations are identified and protected.
- TUC is concerned that the "bounding box" approach to critical habitat will be unclear and afford insufficient protections to Westslope Cutthroat Trout and their habitat, especially considering the conditions and/or activities within upstream and upland areas can affect the specific habitats where Westslope Cutthroat Trout are found. The RS-AP states that "the current amount of critical habitat is insufficient for recovery of this species". Therefore, TUC suggests as a precautionary approach, the entire geographic area identified as critical habitat in Appendix D should be designated as critical habitat rather than "areas in which Critical Habitat can be found". This should include permanent and ephemeral streams. This would, in effect be considered a systems-based approach to ensure the integrity of the critical habitat and its surrounding watershed. Additionally, we believe defining the width of the riparian area within

Trout Unlimited Canada
(403) 221-8360 1 (800) 909-6040
180-4000 Glenmore Court SE, Calgary AB, T2C 5R8

designated critical habitat should be extended to 100 m from the high water mark, while further research is conducted.

- In addition to areas with near-pure populations, it will likely be necessary to identify additional habitats that could support Westslope Cutthroat Trout recovery through restoration stocking initiatives or to connect isolated pure populations. This could include areas connected to pure or near-pure populations or that could be used to expand the range of the species or as coldwater refugia as climate warms, or to connect isolated populations.

We look forward to continuing to work with DFO, Parks Canada, provincial agencies, and other ENGOs to recover Westslope Cutthroat Trout. Thank you for your consideration.

Sincerely,

Lesley Peterson
Alberta Biologist, Trout Unlimited Canada

Cc:
The Honourable Jonathan Wilkinson
Minister, Department of Fisheries and Oceans Canada (min@dfo-mpo.gc.ca)

Pages 78 to / à 89
are withheld pursuant to sections
sont retenues en vertu des articles

19(1), 14

of the Access to Information Act
de la Loi sur l'accès à l'information

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Monday, July 15, 2019 8:04 AM
To: Watson, Ernest
Subject: FW: Westslope Cutthroat Trout Recovery Strategy & Action Plan (RS-AP)

From: [redacted]
Sent: Friday, July 12, 2019 7:28 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Subject: Westslope Cutthroat Trout Recovery Strategy & Action Plan (RS-AP)

Dear Director:

While I thank your department for preparing this RS-AP, please keep in mind that action is required now! The plan - which has taken a long time to be completed - must commit to the immediate recovery of the most vulnerable remaining populations of westslope cutthroat trout.

As far as critical habitat is concerned I do not support the bounding box approach as described in the RS-AP. These fish need DFO to permanently protect the "areas in which Critical Habitat can be found", along with the upland watersheds and wetlands that sustain them.

It is extremely important that DFO (i) routinely monitor and report on the status of all remaining westslope cutthroat trout populations, (ii) complete on-the-ground assessments, and (iii) create an immediate restoration plan for critical habitat.

Thank you for your attention to this matter,

[redacted]

s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Monday, July 15, 2019 7:59 AM
To: Watson, Ernest
Subject: FW: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada
Attachments: Mayhood 2019 RS-AP comments.pdf

From: Dave Mayhood <[redacted]
Sent: Friday, July 12, 2019 3:09 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Subject: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Director
SARA Directorate
Department of Fisheries and Oceans
200 Kent St.
Ottawa, ON
K1A 0E6

Please find our comments on the above document attached.

David Mayhood MSc, President
FWR Freshwater Research Limited
1213 - 20 Street NW
Calgary, Alberta T2N 2K5
Canada

403 283 8865
[redacted]
https://www.fwresearch.ca
Twitter: @dmayhood
Public key at: http://http-keys.gnupg.net/

Comments on the 2019 Proposed Recovery Strategy & Action Plan for the Alberta Population of Westslope Cutthroat Trout

David W. Mayhood

FWR
Freshwater Research Limited

Technical Note No. 2019/07-1

July 2019

Cover photo: This small pool lies between a resource road crossing (background) and a pipeline right-of-way that is heavily used, illegally, as an off-highway vehicle trail. There is a ford crossing at the feet of the photographer. The pool and the tributary are key overwintering sites for the Silvester Creek population of westslope cutthroat trout, therefore critical habitat for this population, which is nominally protected as a designated population under Canada's Species At Risk Act (SARA). During runoff periods, this site is subjected to fine sediment loading from the road, the pipeline crossing, and numerous designated and undesignated off-highway vehicle trails.

To my knowledge, the single enforcement action to protect the creek was taken in 2001, when a road right-of-way mass wasting event loaded large quantities of sediment into the creek 100-200 m above this location. That enforcement action clearly has been ineffectual in dealing with the overall sediment loading problem. Recent (winter 2018-2019) roadbuilding and logging in the headwaters of this tributary are likely to contribute higher, flashier peak flows and more fine sediment to the entire creek, and to Silvester Creek below this tributary's confluence.

This creek overwinters about one-quarter of the Silvester Creek population (Paul and Dormer 2005), which has declined in adult numbers by approximately 75 percent since 2004-2006 (see Figure A in the text). Inexplicably it is not presently designated as critical habitat under SARA. It will be designated as critical habitat under the Proposed Recovery Strategy and Action Plan. My question is, what action will be taken to finally restore and protect this critical habitat, and when will that action be taken?

This document is formatted for printing. Blank pages are intentional.

Comments on the 2019 Proposed Recovery Strategy & Action Plan for the Alberta Population of Westslope Cutthroat Trout

David W. Mayhood

Prepared on behalf of

Timberwolf Wilderness Society
Pincher Creek, Alberta

for

Species At Risk Directorate
Department of Fisheries, Oceans and the Coast Guard
Ottawa, Ontario

FWR Technical Note No. 2019/07-1
July 2019

FWR
Freshwater Research Limited

1213 Twentieth Street NW, Calgary, Alberta T2N 2K5 Canada **403.283.8865**
FWResearch.ca **mtk@fwresearch.ca**

Overview

After a delay of four years, Canada's Minister of Fisheries, Oceans and the Coast Guard released a proposed recovery strategy and action plan for the Alberta populations of westslope cutthroat trout (*Oncorhynchus clarkii lewisi*) on May 14, 2019. Comments on the document were solicited from the public.

Here I comment on this document on behalf of Timberwolf Wilderness Society and FWR Freshwater Research Limited. The comments focus, in no particular order, on

- to what extent the document meets the requirements of the SARA, as itemized above, and
- to what extent the proposals constitute good conservation science that could be expected to recover the species sufficiently so that it reasonably could be delisted.

In brief, I make the following main points.

- The document does not meet several of the requirements specified under the Species At Risk Act. In part this may be due to conflating the requirements and purposes of the recovery strategy and the action plan, which the Act contemplates as distinct functions. The document would benefit from separating these two topics into distinct sections and addressing the SARA requirements of each separately.
- The strategic goal of the recovery program skirts the need to actually recover the species, the entire purpose of the Species At Risk Act. The stated goal does not provide a quantitative target against which progress can be measured, and which can be used to determine objectively when the program has been successful. I make several suggestions about how to correct this problem.
- The definition of critical habitat and its geographic identification are internally contradictory, which will make management difficult and enforcement of SARA protections next to impossible. The science, if any, supporting the critical habitat work is not publicly available, so it is not clear whether the decisions regarding critical habitat are defensible. The recognition of critical habitat as extending into the terrestrial realm and upstream to the watershed boundary is a major improvement over the very limited identification of critical habitat given in the previous recovery strategy. Unfortunately, this section goes on to restrict critical habitat only to locations with the attributes listed in a table. None of the locations are actually identified on the maps, leaving critical habitat completely unidentified. The suggested correction is to identify the watershed and stream network above the lowest-elevation location holding pure cutthroats, including the terrestrial and aquatic realms, as critical habitat.
- No actual recovery actions are proposed after as much as six years of planning, but are urgently needed. Critical problem areas are known, as are cost-effective, proven solutions. Existing populations are far too small to survive, and are at very high risk of extirpation even in the short term. They must be enlarged. The only means of enlarging them sufficiently is to provide additional secure habitat free from hybridizing or competing species. Do it, or lose populations critical for successful recovery, one by one.

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Contents

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Introduction

Canada's Species At Risk Act (SARA) places a number of statutory duties on the Minister of Fisheries, Oceans and the Coast Guard. Among them are requirements to post a Recovery Strategy for every listed species on the SARA registry, and an Action Plan describing how the Recovery Strategy will be executed.

Specific requirements of the Recovery Strategy are provided in SARA sections 41, 43, and 46, among others, as follows.

41. *(1) If the competent minister determines that the recovery of the listed wildlife species is feasible, the recovery strategy must address the threats to the survival of the species identified by COSEWIC, including any loss of habitat, and must include*

(a) a description of the species and its needs that is consistent with information provided by COSEWIC;

(b) an identification of the threats to the survival of the species and threats to its habitat that is consistent with information provided by COSEWIC and a description of the broad strategy to be taken to address those threats;

(c) an identification of the species' critical habitat, to the extent possible, based on the best available information, including the information provided by COSEWIC, and examples of activities that are likely to result in its destruction;

(c.1) a schedule of studies to identify critical habitat, where available information is inadequate;

(d) a statement of the population and distribution objectives that will assist the recovery and survival of the species, and a general description of the research and management activities needed to meet those objectives;

(e) any other matters that are prescribed by the regulations;

(f) a statement about whether additional information is required about the species; and

(g) a statement of when one or more action plans in relation to the recovery strategy will be completed.

43. *(1) Within 60 days after the proposed recovery strategy is included in the public registry, any person may file written comments with the competent minister.*

(2) Within 30 days after the expiry of the period referred to in subsection (1), the competent minister must consider any comments received, make any changes to the proposed recovery strategy that he or she considers appropriate and finalize the recovery strategy by including a copy of it in the public registry.

46. *The competent minister must report on the implementation of the recovery strategy, and the progress towards meeting its objectives, within five years after it is included in the public registry and in every subsequent five-year period, until its objectives have been achieved or the species' recovery is no longer feasible. The report must be included in the public registry.*

SARA s.47 states that the minister must prepare one or more action plans based on the recovery strategy. Specific requirements of the Action Plan are provided in SARA sections 49 to 51 among others, as follows.

49. *(1) An action plan must include, with respect to the area to which the action plan relates,*

(a) an identification of the species' critical habitat, to the extent possible, based on the best available information and consistent with the recovery strategy, and examples of activities that are likely to result in its destruction;

(b) a statement of the measures that are proposed to be taken to protect the species' critical habitat, including the entering into of agreements under section 11;

(c) an identification of any portions of the species' critical habitat that have not been protected;

(d) a statement of the measures that are to be taken to implement the recovery strategy, including those that address the threats to the species and those that help to achieve the population and distribution objectives, as well as an indication as to when these measures are to take place;

(d.1) the methods to be used to monitor the recovery of the species and its long-term viability;

(e) an evaluation of the socio-economic costs of the action plan and the benefits to be derived from its implementation; and

(f) any other matters that are prescribed by the regulations.

...

50. *(1) The competent minister must include a proposed action plan in the public registry.*

(2) Within 60 days after the proposed action plan is included in the public registry, any per- son may file written comments with the competent minister.

(3) Within 30 days after the expiry of the period referred to in subsection (2), the competent minister must consider any comments received, make any changes to the proposed action plan that he or she considers appropriate and finalize the action plan by including a copy of it in the public registry.

(4) If an action plan is not finalized in the time set out in the recovery strategy, the competent minister must include in the public registry a summary of what has been prepared with respect to the plan.

51. *(1) If the competent minister is of the opinion that an existing plan relating to a wildlife species meets the requirements of section 49, and the plan is adopted by the competent minister as a proposed action plan, he or she must include it in the public registry as a proposed action plan in relation to the species.*

(2) The competent minister may incorporate any part of an existing plan relating to a wildlife species into a proposed action plan for the species.

The Minister of Fisheries posted on the SARA Registry a recovery strategy for the Alberta populations of westslope cutthroat trout in March 2014 (DFO 2014). This document included a recovery plan by Alberta Environment and Parks, as it is now known (AEP 2013) as part of the recovery strategy. DFO (2014) stated that an action plan would be completed by March 31, 2015, a deadline that was not met. In the meantime work was begun by October 2014, if not earlier, on a revised recovery strategy combined with an action plan. After numerous public entreaties, including demand letters threatening applications for judicial review, to issue an action plan for the species the minister issued a summary of the

incomplete action plan on May 31, 2017. After Timberwolf filed for judicial review in the Federal Court of Canada in March 2019, the Fisheries Minister posted a Proposed Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) in Canada (DFO 2019) on May 14, 2019. Comments on the document were solicited from the public.

In response to that solicitation, I comment on DFO (2019) on behalf of Timberwolf Wilderness Society and FWR Freshwater Research Limited. The comments focus, in no particular order, on

1. to what extent the document meets the requirements of the SARA, as itemized above, and
2. to what extent the proposals constitute good conservation science that could be expected to recover the species sufficiently so that it reasonably could be delisted.

Key Issues

- The Department of Fisheries, Oceans and the Coast Guard (DFO) has acted unlawfully several times in the past on this file, and proposes to do so again in several places in this document. The Species At Risk Act (SARA) places many statutory obligations on the Minister, obligations that cannot lawfully be ignored. I am certain that it is not the intention of the Minister to break the law. I believe he is not getting well-researched, clear, timely advice that would allow him to make reasonable decisions in a timely manner.
- With the greatest of respect to my colleagues, DFO and Alberta Environment and Parks (AEP) cannot continue to treat SARA as simply a set of guidelines that can be ignored or adjusted at the will of the public service. SARA is a law setting statutory obligations that the Minister of Fisheries must meet, and its provisions are enforceable. By and large, I think it is a well-drafted law that, if diligently applied and adhered to, can recover at-risk species to the point where they are out of danger of extinction by any reasonable measure. My intention in this review is to offer suggestions for improving the Proposed Recovery Strategy-Action Plan so that it adheres unequivocally to SARA, uses the best available conservation science, and provides an easily understood practical guide to recovering the subject species, westslope cutthroat trout (Alberta population).
- A serious weakness of this document is that it lacks clear direction as to what the goal of the recovery program is, and how it intends to get there. Since that is the entire purpose of the document, it is essential that this problem be corrected. The population and distribution goals have not changed since the original recovery strategy. They are

  "Protect and maintain the existing distribution of ≥ 0.99 pure populations of Westslope Cutthroat Trout, and re-establish pure populations to self-sustaining levels, within the Saskatchewan – Nelson rivers watershed in Alberta."

  These goals are not quantitative. They do not give you a measurable target against which you can assess your progress or ultimate success. How will you know when you've finished the job?
- The purposes of SARA (s.6) provide a statutory goal. They are

  "to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened."

  The intended meaning of "recovery" is not defined in the legislation; however you need a definition to provide a goal for this Recovery Strategy. The SARA purposes make it clear that the intent is to avoid extinction, or where extirpation has occurred, that the species is restored to its former range. I suggest that a reasonable, practical and quantitative definition for determining overall recovery for planning purposes is as follows.

  "Westslope cutthroat trout will be considered recovered when viable, self-supporting population networks have been restored to enough of the original range in the Oldman River and Bow River

drainages that the species is highly unlikely (< 1% probability) to go extinct in the Alberta native range within 200 years, as determined by peer-reviewed population viability analyses."

Similarly, I suggest that the population and distribution goals be

"To re-establish individual, viable, self-sustaining westslope cutthroat trout population networks in each of the Bow River and Oldman River drainages sufficient to avoid extinction at a combined probability of < 1% in each major drainage, and in which each individual population network has a probability of extinction < 5% over 200 years, as determined by peer-reviewed population viability analyses."

My justification for using those figures is described in more detail elsewhere (Mayhood 2014, especially pp. 10-14, 35-37). I have reduced the overall target probability of extinction since then because I think it is more supportable, and is quite achievable at the level of the individual major drainage basins, and at the level of the entire Alberta population. If you have more supportable calculations, use them with written justification, but do set quantitative, measurable targets.

- The identification of critical habitat is confusing internally contradictory, and therefore unenforceable.
- This document is not posted on SARA Registry in any of the expected locations (as of 2019-07-03, e.g.; https://wildlife-species.canada.ca/species-risk-registry/species/speciesDetails_e.cfm?sid=861#ot10 or https://faune-especes.canada.ca/registre-especes-peril/species/speciesDetails_e.cfm?sid=861). People searching for the most up-to-date documents on the species will look for it under the species account for the Alberta population, of which there are at least three versions, all of them out of date, but will find no reference to the most current document in any of them. It can only be found under Recovery Strategies from the main SARA Registry wildlife page https://wildlife-species.canada.ca/species-risk-registry/sar/recovery/recovery_e.cfm and then only by selecting the link: View all Recovery Strategies. The species link on that page is dead. If you are looking for the long-overdue Action Plan, it is simply not listed anywhere except under the "View all Recovery Strategies" link noted above. An Action Plan is not a Recovery Strategy, and interested parties will not look for it under the wrong heading. The Action Plan is not listed under the View All Action Plans link from the Action Plan page accessed from the main SARA Registry page https://www.registrelep-sararegistry.gc.ca/default.asp?lang=Enn=1A1E22ED-1. Finally, the SARA Registry home page is out of date by almost a year: the listing of most recent documents ends at September 2018. In other words, you must know that the Recovery Strategy-Action Plan actually exists or you will not be able to find it at all, and even if you do it is ridiculously difficult to do so. Effectively, most of the Canadian population is denied access to this document, and so are unable to comment on it. Please update, correct and rationalize the SARA Registry site.
- There are no quantitative population targets — again — after 5 years of work. No population targets make it impossible to determine how much secure habitat and how much critical habitat is required for recovery. Estimates of minimum population sizes are

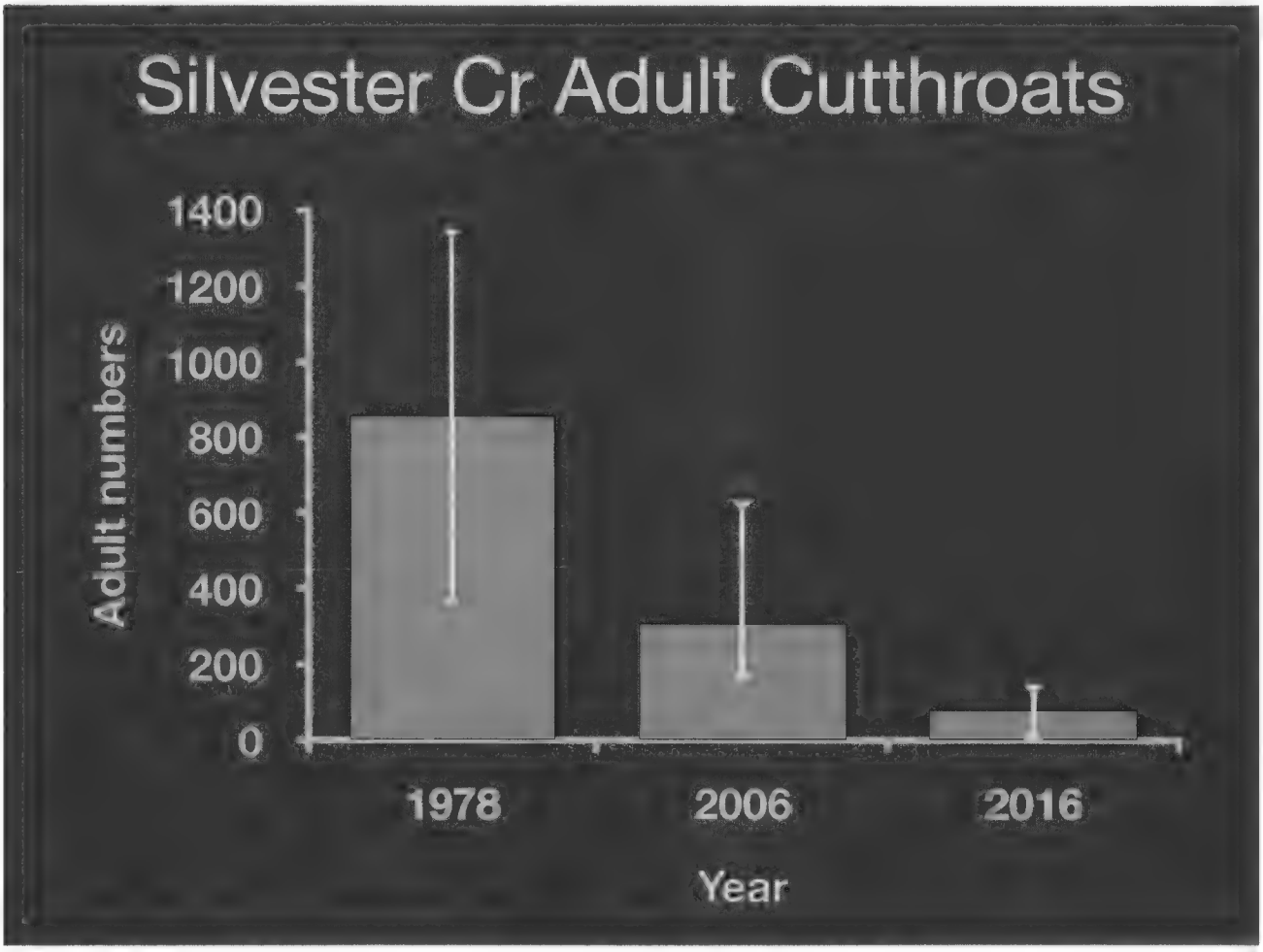
readily available that do not require anything more that a basic knowledge of the literature on conservation genetics of populations. They should be used as a first estimate. This problem is discussed more thoroughly in the Page-by-Page section, below.

- Largely because there are no quantitative population targets, there is insufficient secure habitat identified to meet any reasonable population targets. I realize that identifying specific habitat for recovery is intended to be determined with the proposed research program, but at this point the approximate amount of habitat required would be very helpful in organizing your recovery work. Despite the fact that there is no plan to increase secure habitat, stocking appears to be the population expansion method chosen. Stocking cannot increase population sizes unless there is additional secure habitat. This and other issues with stocking as a recovery tactic are discussed more thoroughly in the Page-by-Page section, below.
- Changing the definition of critical habitat has effectively removed protection for critical habitat. SARA has strong provisions for protecting and enforcing critical habitat, but they depend on a clear definition of what constitutes critical habitat, and identification of the geographic location of critical habitat. The definition and identification of secure habitat in the proposal make the critical habitat provisions unenforceable. This problem and a reasonable solution for it is discussed at length in the Page-by-Page section, below.
- There is very little publicly reported data to support the Proposed Recovery Strategy and Action Plan. Throughout SARA the need to use the "best available information" is specified. The best available information to address most of the recovery issues is obtained from rigorous, peer-reviewed conservation science. That material does not have to be included in the Recovery Strategy-Action Plan document, but it must be publicly available to support the proposals in the document. I suggest that DFO use one of its existing report series, or establish a separate, purpose built for SARA conservation support, peer-reviewed report series that posts the documents on the SARA public website in PDF format.
- After five years (six, taking the Alberta recovery plan as part of DFO's Recovery Strategy, as it does), no actual action has been taken outside the national parks to recover even a single designated population, and again no specific, actual recovery action is proposed here, in a plan intended to last at least five years more. Since the Alberta Recovery Plan was issued in 2013, one "protected" remnant population (Evan-Thomas) has been driven extinct. Another (Silvester) is known to be in steep decline, having lost in the order of 75% of its adult population between 2004-2006 and 2016 (Figure A). Several have major unresolved problems affecting critical habitat that are continuing to get worse (Mayhood 2017). All others, with the possible exception of one, have longterm probabilities of extinction far in excess of any level that could reasonably be considered acceptable (Mayhood 2018). Immediate action is called for. The proper responses are adequately understood to support immediate recovery action for many SARA-designated stocks. Specifically, that at-risk populations must be enlarged, and that is only possible by providing them with additional secure habitat. We know how to do that; there are proven methods presently in use elsewhere, so they are cost-effective.

SARA s.38 is relevant here:

"...if there are threats of serious or irreversible damage to the listed wildlife species, cost-effective measures to prevent the reduction or loss of the species should not be postponed for a lack of full scientific certainty."

Figure A. Decline in Silvester Creek adult population, 1978 to 2016. 1978 data from Tripp *et al.* (1979a, b) estimated as described elsewhere (Mayhood 2012). Error bars mark the maximum and minimum estimates, bar height is the median estimate. 2006 adult population estimated from Dormer and Paul's (2006) summer size distribution and total abundance data and Tripp *et al.*'s (1979b) sex distribution and maturity data as calculated by Mayhood (2012). Error bars are estimated 95% confidence limits. 2016 adult abundance data from J. Earle, reported in COSEWIC (2016:Table 4). Error bars are bootstrapped confidence interval, level not reported, but probably 95%.



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Page-by-Page Comments

PDF p. 4, footnote: *"The new provincial recovery plan will be adopted and will replace the 2012-2017 plan once it is finalized."*

This plan will need to be subject to a 60-day public comment period, and must meet the statutory criteria for SARA Recovery Strategies & Action Plans. The plan we are commenting on is therefore incomplete, so it has have not been validly posted. DFO is saying that it will accept the provincial plan sight unseen, which surely it can't do. The Minister cannot accept a document like this, in which large parts do not yet exist.

PDF p. 10: Describes this document as "Federal addition to the Alberta Westslope Cutthroat Trout Recovery Plan, prepared by Fisheries and Oceans Canada." Alberta does not have jurisdiction over the Recovery Strategy or the Action Plan under SARA. This must be a federal plan.

PDF p. 11: What is the reason for providing only a summary of the requirements of the Recovery Strategy and Action Plan under SARA s.41 and s.49? It costs nothing to include all of the requirements verbatim. A summary requires readers to look up SARA to ensure that everything has been covered.

In the original SARA sections, The Recovery Strategy is required to be consistent with, e.g., COSEWIC's status assessments. The most recent assessment is COSEWIC (2016), and includes critical new information, such as the most recent abundance estimates for the remnant populations of genetically pure westslope cutthroats. The Proposed Recovery Strategy-Action Plan doesn't use these data. Include the full text of the SARA requirements for recovery strategies and action plans. Review and *use* the latest data from the most recent COSEWIC status assessment (COSEWIC 2016), and make the Recovery Strategy-Action Plan consistent with the information in that document, as legally required.

The Action Plan under SARA s.49(b) must include a statement of the measures that are proposed to be taken to protect the species' critical habitat, including the entering into of agreements under section 11. Section 11 agreements are stewardship agreements and, according to my reading, are required when the Minister engages other parties, such as the Alberta Government, to conduct any part of the recovery program for a species. Because such agreements have statutory requirements that must be met (s.11(2)), I believe that they must be public. It is clear that the Minister has a stewardship agreement with the Alberta Government to manage and recover westslope cutthroat trout, but the agreement has not been made public. Certainly it does not appear on the SARA Registry.

SARA s.11: *A competent minister may, after consultation with every other competent minister, and with the Canadian Endangered Species Conservation Council or any of its members if he or she considers it appropriate to do so, enter into a conservation agreement with any government in Canada, organization or person to benefit a species at risk or enhance its survival in the wild.*

(2) *The agreement must provide for the taking of conservation measures and any other measures consistent with the purposes of this Act, and may include measures with respect to*

(a) monitoring the status of the species;

(b) developing and implementing education and public awareness programs;

(c) developing and implementing recovery strategies, action plans and management plans;

(d) protecting the species' habitat, including its critical habitat; or

(e) undertaking research projects in support of recovery efforts for the species.

Also, list those requirements of the Recovery Strategy and the Action Plan separately. The two documents are not the same thing, don't have the same SARA legal requirements, and mixing them together confuses their two purposes. The Recovery Strategy describes the overall approach to recovery (achieving the goal); the Action Plan describes specific steps (objectives) on the way to achieving the goal. They can perhaps be linked in one document as separate sections, but should not be intermixed.

The current federal plan relies on the provincial recovery plan, and expresses a large role in research and conservation for the Albertan provincial government. The federal proposed plan as written does not meet the requirement of 49(d), as **footnote 3 on PDF p. 15** refers to the part of the provincial plan that describes work that was to be undertaken up until 2017. Since DFO is relying on the provincial government to produce part of the recovery strategy, the Species at Risk Act requires a conservation agreement. DFO must include on the Species At Risk registry that conservation agreement made under section 11 of the Species at Risk Act.

PDF p. 12: The Alberta 2012-2017 recovery plan is now out of date and will be replaced by a new version. It is stated that plan "will be adopted and will replace the 2012-2017 plan once it is finalized" (footnote 2). Proposed Recovery Strategies and Action Plans are publicly reviewable prior to being adopted, and must be posted on the SARA Registry for that purpose. The Minister cannot adopt or approve a document that does not yet exist, especially a document that has not first been posted for public comment.

Residence: The attempt here (**PDF pp. 12-13**) to restrict the definition of residence to only the redd produced by the fish for spawning and egg incubation is directly contradicted by the definition of residence in SARA:

"residence" means a dwelling-place, such as a den, nest or other similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating.

Westslope cutthroat trout breed, rear, stage (in migratory life-history types), overwinter, and feed in suitable areas throughout rivers, streams and lakes. They reside in the habitat in precisely the same way that, for example, garter snakes reside in hibernacula over winter, making no physical alterations to the location. "Investment" in physically altering the habitat is not a condition of residence as defined in SARA. If it were, it would exclude as residence

breeding, rearing, staging, wintering, feeding or hibernating locations used as residences by many species that make no alterations to the natural habitat, such as birds that lay eggs directly on cliff ledges or on the ground, bats that use loose tree bark, cavities or caves for roosting, and many others. For the purposes of this Recovery Strategy-Action Plan, the entire area of occupancy of streams or lakes in which genetically pure or designated near-pure remnant populations of westslope cutthroat trout reside is unequivocally the residence of this species.

PDF p. 13: Specific quantitative population objectives are needed to plan population recovery, and to determine whether sufficient critical habitat for recovery has been identified. You can't do either if you don't have those numbers.

The **Population and distribution objectives** in the 2019 Proposed Recovery Strategy-Action Plan are the same as in the 2014 Recovery Strategy (DFO 2014:4), which said

"Population data for existing genetically pure Westslope Cutthroat Trout populations are lacking as are data to determine the feasibility of expanding many populations. Considering that, the recovery team was not comfortable providing empirical population targets at this point in time."

Still, in 2019 no "empirical population targets" and explicit distribution objectives are offered. Nevertheless, four objectives are proposed to meet the non-existent population and distribution objectives, none of them directed at obtaining the data the 2014 Final Recovery Strategy-Action Plan claims are necessary to meet those objectives.

Most of those necessary population data now exist (COEWIC 2016:39-41, see also p. 44[1]). I analyzed those data and presented that analysis at the meeting of the Canadian Conference on Freshwater Fisheries Research in Edmonton on January 6, 2018, with several members of the joint DFO-AEP westslope cutthroat trout recovery team in attendance (Mayhood 2018).

The analysis describes the existing problem, and provides an overall recovery strategy with examples of how to calculate realistic "empirical" recovery targets in an action plan for each of the remnant populations of Alberta westslope cutthroat trout as they were then known. In my comments on DFO's initial 2014 Proposed Recovery Strategy, I presented a much more detailed presentation of an overall recovery strategy and how to develop actionable plans to attain explicit population and distribution targets (Mayhood 2014). Most of this material remains valid as is, or can be adapted with minimal effort to deal with the additional information now available.

Both the presentation (linked above) and the report (Mayhood 2014) are integral parts of my comments on this Proposed Recovery Strategy-Action Plan, and should be read as supplementary to my comments on the present document.

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[1] The minimum viable population for persistence of 470 individuals (COSEWIC 2016:44), attributed to Mayhood and Taylor (2011), is mistaken, apparently a misinterpretation of p. 28 of our report. An adult population of 470 has only a 50% chance of survival for 40 generations, which I suggest is far too low to be acceptable for persistence for recovery planning purposes.

Even in the absence of any data on existing population sizes, there are well-known specific limits on minimum population sizes needed to maintain the genetic integrity of populations that should be used as minimal population objectives. The so-called 50/500 rule of thumb holds that *effective* population sizes of at least 50 adults are required to prevent inbreeding depression, and *effective* population sizes of at least 500 are needed to maintain loss of gene diversity through genetic drift in the long term.[2] *Actual* numbers of adults required are commonly five to ten times larger that the effective population number, so as an interim guideline, longterm objectives of 2500 to 5000 adults in each remnant population are likely required. These minimum numbers are consistent with those estimated for a large number of other vertebrate populations (Reed *et al.* 2003, Reed 2005, Traill *et al.* 2007, 2010).

I have described how to obtain such large numbers at length elsewhere (Mayhood 2014). In short, additional secure habitat is required in connected stream networks, which would restore gene flow among sub-populations and allow recolonization in the event of sub-population reduction or loss. There are methods for estimating how much secure habitat is needed (e.g., Hilderbrand *et al.* 2000, Young *et al.* 2005, Cowley 2008, Muhlfeld *et al* 2012). Please use them.

DFO and AEP have had at least 5 years to produce a recovery strategy with actionable plans for recovery of the known remnant populations, with clear population and distribution objectives. Together these agencies have numerous biologists assigned to this project (at least 8, with access to several additional management and research scientists as needed). I was reliably informed by one of the recovery team leaders that there is a budget for this recovery program of approximately $1 million. There is simply no reasonable excuse for the recovery team not to have produced the required explicit population and distribution objectives for this revised Recovery Strategy. This should be done immediately, and the results included in the final version.

PDF pp. 13-22: Section 3.0 Broad strategies and recovery actions

PDF p. 13, Paragraph 1 under this heading refers the reader to Section 7, which is entitled **Activities permitted by the recovery strategy-action plan**. Section 7 does not hold any of the bullet points on this and the following page. Please correct this.

If I understand correctly, this reference must be to Section 7.0 in **Alberta Westslope Cutthroat Trout Recovery Plan 2012 – 2017**, which is attached to the Proposed Recovery Strategy-Action Plan, and is supposed to be part of it. This document was published in early 2013, and as the title indicates, it is out of date and does not meet the requirements of SARA. Note that SARA s. 41(1)(a-c) give the following as requirements to be included in a Recovery Strategy.

"41. (1) If the competent minister determines that the recovery of the listed wildlife species is feasible, the recovery strategy must address the threats to the survival of the species identified by COSEWIC, including any loss of habitat, and must include

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[2] See Jamieson and Allendorf (2012, 2013) and Frankham *et al.* (2013, 2014) for opposing views and an extended discussion of the use of this rule of thumb for conservation planning purposes.

(a) a description of the species and its needs that is consistent with information provided by COSEWIC;

(b) an identification of the threats to the survival of the species and threats to its habitat that is consistent with information provided by COSEWIC and a description of the broad strategy to be taken to address those threats;

(c) an identification of the species' critical habitat, to the extent possible, based on the best available information, including the information provided by COSEWIC, and examples of activities that are likely to result in its destruction;"

The most recent COSEWIC (2016) status update for westslope cutthroat trout is not considered in the 2013 Alberta recovery plan, which therefore cannot address key issues raised by COSEWIC. Of particular importance are the abundance estimates for remnant populations provided by COSEWIC (2016), which show that all but possibly one remaining pure or near-pure populations have numbers that are far too low to permit them to persist. This fact implies that adult abundances must be increased substantially. Additional secure habitat must be provided to enlarge these populations. That secure habitat likely can only be provided by removing introgressing species like rainbow trout and rainbow-cutthroat hybrids from historically occupied native habitat in a manner that re-establishes gene flow among once-connected stocks, and protecting those stocks from re-invasion with barriers.

The Minister must work cooperatively with Alberta, but it cannot allow the province to ignore SARA requirements for recovering the species, the entire purpose of the Act.

COSEWIC (2016:vii-x & elsewhere), among other issues, identifies a continuing decline in the number of mature individuals, continuing habitat loss, continuing loss of area of occupancy secure from hybridization, a need to remove other invasive trout, and extreme population fragmentation as key factors in its conservation assessment of Threatened. Adult population decline to zero is the essence of extinction, and must be reversed to meet the SARA goal of recovery, as identified in the purpose of the Act. The Minister has determined that recovery is possible, based on the recovery potential assessment (DFO 2009, Cleator *et al.* 2009). The COSEWIC concerns are not addressed by the 2013 Alberta recovery plan, which emphasizes *protection in place* of the remaining pure populations. Again, those populations are far too small, and will almost inevitably go extinct. They must be enlarged substantially.

Please specify precisely how and where this Proposed Recovery Strategy-Action Plan addresses these critical issues identified by COSEWIC (2016), which are statutory requirements (SARA 41(1)(a-c)).

PDF p. 14: 3.1 Strategic direction for recovery and implementation schedule

Is this part of the Recovery Strategy, or the Action Plan? It's important to identify them, because SARA distinguishes between them. The two documents are not the same; the requirements are different. If this section is intended to cover both, identify which parts address SARA s.41 and which address SARA s.49.

PDF p. 14-15: Section 8 of the Alberta Recovery Plan

"Section 8 of the Alberta Recovery Plan, presents the actions, determined by the 2013 Alberta Westslope Cutthroat Trout Recovery Team, that could be taken to achieve the recovery goals and objectives for the species. Actions identified in this section are not considered commitments in this recovery strategy and action plan, but may be implemented or modified as considered necessary during implementation of measures by DFO and its partners."

This section specifies only additional studies and monitoring that may be done, not actual actions to recover any of the remnant populations, all but perhaps one of which are at imminent, ongoing risk (Mayhood 2018). These matters were identified more than six years ago. Surely some of this work has now been at least partly completed, allowing actual recovery actions to be started, as proposed under Strategy MR5. Please identify what actual recovery actions are now being undertaken, or that have been completed.

The purpose of the Action Plan is to describe what you will actually do to implement the Recovery Strategy, not merely to list a wide range of possibilities. Please state what you actually intend to do, providing quantitative, measurable objectives wherever feasible. If you don't, you have no way of measuring progress toward achieving the goal(s) in the Recovery Strategy, as you *must* do (SARA s.46):

"The competent minister must report on the implementation of the recovery strategy, and the progress towards meeting its objectives, within five years after it is included in the public registry and in every subsequent five-year period, until its objectives have been achieved or the species' recovery is no longer feasible. The report must be included in the public registry."

Also in this section of the **Alberta Recovery Plan (pp.45-46, under 8.4 Management and Regulation):**

"Because the recovery strategy is focused on both maintenance and recovery, approaches should focus on ways to maintain and protect the species…"

This is certainly the right thing to do in the short term, but it is essential to recognize that maintenance and protection of existing populations *in situ* is a short-term measure to be used only until recovery efforts can be implemented. The current populations are nearly all too small to maintain their genetic diversity, most are so small as to be at considerable risk of inbreeding depression, and most are so small as to be at unacceptably heightened risk of loss from random demographic and habitat changes. Unless these populations are enlarged, all problems will eventually drive most of these populations to extinction even without any additional pressures on their viability. Longterm maintenance and protection are not an option as a goal (1) because it's not possible in the long term, and (2) because the purpose of SARA is to *recover* the species. Every remaining genetic line is needed to maximize the ability of the species to adapt; so each needs to be recognized as essential to species recovery.

PDF p. 15, re: Section 9 of the Alberta Recovery Plan.

"The implementation schedule (Section 9 of the Alberta Recovery Plan) prioritizes the actions, links them to objectives and identifies a lead agency for each action. Note that the Alberta Recovery Plan identified a timeframe for the recovery actions. The timeframe listed in the implementation table in Section 9 is provided to demonstrate costs associated with the action and does not indicate the conclusion of the recovery action. Many of the recovery actions will be ongoing throughout the recovery of the species."

It would be very helpful (and essential under SARA s.46) to have a report on the progress made so far in achieving the items in the Alberta Recovery Plan implementation schedule (their Table 2). It is not possible to understand to what extent the Proposed Recovery Strategy-Action Plan addresses matters in this table that still need to be addressed without such an accounting. Presumably the members of the recovery team would benefit from having it as a reference, as well.

PDF p. 15, Table 1: Footnote 3 states

"See Alberta Westslope Cutthroat Trout Recovery Plan 2012-2017, Section 8 (Action Plan) and Section 9 (Implementation Schedule) for a complete list and description of all recovery measures."

This appears to contradict a previous statement on **PDF p. 14-15** just noted above that these are not commitments; i.e., they are not statements of what you are actually going to do. What you are actually going to do is what is supposed to be in the Action Plan.

Table 1, item 1 (genetic surveys): The work I have seen on this that has been completed appears to be excellent. This information, though, has not been properly used to meet the stated threat or objective #1 to be addressed. See my comments on your critical habitat provisions for an explanation.

Table 1, item 2 (prioritize existing stream and lake populations according to status of threats): This is an essential step, and one that should have been addressed shortly after the first recovery strategy document was released in 2014. Some specific possibilities were being enthusiastically promoted by some of the biologists on the recovery team at meetings I attended last year. By now you must have some actionable plans to recover, improve or re-establish selected populations. These should be described in the Action Plan. I understand that this step is an ongoing exercise, and that you can't do everything all at once, but I do note that you identify it as having a short-term timeline, which is certainly appropriate at this late date. Again, recall that next to nothing has been done to recover this species within the Government of Alberta's jurisdiction since the issue was first recognized at least 70 years ago. We know what must be done, others are doing it in the US and in Banff National Park (e.g., Humphries and Dickinson 2011), so describe or at least outline some specific projects that you will undertake to recover specific populations toward meeting the Recovery Strategy goals. Also see SARA s.38:

"if there are threats of serious or irreversible damage to the listed wildlife species, cost-effective measures to prevent the reduction or loss of the species should not be postponed for a lack of full scientific certainty."

On the second page of Table 1 under this item 2, you state

"Where appropriate, examine the feasibility of enhancing existing populations by stocking."

There is no rationale provided for this plan. To what purpose are you considering this action? What is the problem you are trying to solve here, and why do you think this is an appropriate approach? I am very concerned that the intention might be to increase population size by stocking additional fish into existing habitat. If so, it will likely fail (e.g., Miller 1954, 1958; Vincent 1987). In most cases the habitat will already be filled with members of the existing population: the habitat will be at its carrying capacity.

Please provide a clear rationale for this proposed action. In the explanation, distinguish between supplementary stocking to increase population size, and introducing small numbers of individuals from selected genetic lines to increase genetic diversity and reduce inbreeding depression, which might more properly be seen as genetic rescue by augmenting gene flow. Also be clear about whether by stocking you mean to reintroduce trout to previously-occupied habitat, or to archive part of a population in secure, previously unoccupied habitat above a natural barrier, say. This proposal to use "stocking" as a recovery technique needs much better explanation.

Table 1, item 3 (Monitoring): This item indicates that you intend only to monitor "priority" populations; however, all remaining pure populations are needed for recovery and all of them are protected under SARA. For those reasons, all pure populations must be monitored, and those near-pure populations that you are attempting to recover must be monitored as a matter of good scientific and conservation practice.

I'll just add here that electrofishing is hard on fish (Snyder 2003). Injuries are inevitable, because you inadvertently get too close to at least some individuals that you just can't see. Nearly all of these populations are tiny, and can ill afford to lose any individuals. Specify that minimum impact techniques such as direct observation and underwater photography will be the preferred method for studying and monitoring protected and recovery populations.

Also, this item does not mention monitoring critical habitat. Critical habitat is protected in SARA, so must be protected by DFO, so it must be monitored. How else will you know whether your protection measures are working? And where habitat restoration or reclamation projects are initiated, how do you know whether those projects are working if you don't monitor the habitat and the populations using it?

Add an entry here to cover critical habitat monitoring.

Table 1, item 4 (removing non-native species): This item contemplates removing non-native species as a broad strategy of management and regulation that may or may not occur. In fact, it is an absolutely essential step in any realistic recovery strategy.

You are required to recover Alberta's westslope cutthroat trout species population to a self-sustaining level. The problem: the native subpopulations have been devastated. The remnant subpopulations are fragmented into a few tiny examples isolated from each other in the extreme headwaters of the Bow and Oldman river drainages, blocking gene flow among them to the extent that loss of genetic diversity and inbreeding is degrading their fitness and limiting their ability to adapt. The small size and isolation of these few remaining stocks together have greatly increased their susceptibility to loss due to habitat catastrophes and random demographic accidents. In their present state, they are doomed to extinction. Their former habitat is technically suitable for them, but unsafe to use because it is now occupied by species that can hybridize them out of existence, or that in some cases can outcompete them.

In brief, the problem is small, isolated populations, and the solution is to increase their size and reconnect them, re-establishing gene flow among them. Bigger populations must have additional secure habitat. More secure habitat can only be provided by removing the non-native species from sufficient existing habitat formerly occupied by westslope cutthroat trout. Your work cannot be directed to answering the question: *Can it be done*? It must be directed at working out ***HOW it can be done. NOT*** removing non-native species is not an option.

DFO needs to rewrite this table so that the recovery effort is primarily directed at solving this problem as the principle part of the Recovery Strategy. You will also want to rearrange and rewrite some parts of the document to be consistent with this strategy. The Action Plan should be focussed on how, where and when you will do it.

Table 1, item 5 (Restore and recover priority populations): This item addresses some of the issues I raised in the above comments under item 4. To that extent it's part of the Recovery Strategy. To minimize confusion, I suggest that you keep the Recovery Strategy clearly separate, and include any specific or detailed proposals to resolve the issues about how you are going to carry out the strategy in the Action Plan.

Table 1, item 6 (Develop recovery implementation group(s)):

This is clearly an Action Plan item. It's a good approach. It should be kept separate from the Strategy, but should refer to the relevant parts of the Recovery Strategy. Including specific dates in the timeline column for all of the numbered items would encourage timeliness, and would give you a standard against which you could measure progress for the required 5-year progress report. These are not enforceable timelines, as I understand it.

Table 1, item 7 (Develop recovery implementation group(s)): Here and elsewhere in Table 1 you refer to numbered recovery objectives, but they don't seem to be listed anywhere. For example, *"re- establish pure populations of Westslope Cutthroat Trout in sites within their historical range that recognizes the diversity of their life history strategies in Alberta"* is mentioned elsewhere in Table 1. This is an important objective, but I couldn't find the rationale for it. Make the Recovery Strategy a separate section (SARA actually contemplates separate documents for the Recovery Strategy and the Action Plan) with a clear statement of the problem(s), an overall recovery goal, and a clear list of overall objectives, all supported by a rationale for each. A

separate Action Plan can then refer to the goal and those specific objectives, specifying how you are going to meet them. The result would be far more comprehensible. In the Action Plan it would be advisable to list each of the populations and describe their specific problems, and what actions your are going to take to deal with them.

Table 1, item 9 (see also Alberta recovery Plan sections 7.3 & 8.3 A24: This item mentions using **adaptive management**. Adaptive management should be based on the results of controlled experiments. If you are going to use it, design your programs as experiments so that each facet can be evaluated quantitatively. Adaptive management does not mean "let's try this, and if it doesn't work, we'll try something else." It is a formal experimental approach to resource management (Holling 1978, Lee 1999). Please make this explicit in your document. If you don't, it could well lead to a catastrophic failure such as the loss of protected populations due to an inadequately designed and monitored recovery procedure. There are no mulligans (second chances) with some recovery designs.

PDF p. 21, 3.2 Actions already completed or underway: Throughout this section please cite the relevant reports on this work, and where they can be retrieved, so that the work can be properly evaluated. Note that a five-year report is required under SARA s.46 to document progress of the Recovery Strategy. That report, which has not yet been posted, would describe all of the work claimed here.

Please show the words in full at first occurrence for all acronyms and abbreviations. Use abbreviations sparingly, especially when they occur only once. Those in this section are not properly defined.

PDF p. 22. 4.1.1 Critical habitat, general description:

"This recovery strategy - action plan identifies critical habitat for Westslope Cutthroat Trout (Alberta populations), as all areas currently occupied by naturally-occurring pure-strain populations within the original Westslope Cutthroat Trout distribution, including the areas on which Westslope Cutthroat Trout depend indirectly (e.g. riparian areas) in order to carry out their life processes and areas where genetically pure populations of the species formerly occurred and has the potential to be reintroduced."

This definition is directly contradicted elsewhere in this document; e.g., **PDF p. 26** under the heading **Critical habitat geographic information**:

"The critical habitat's functions, features and attributes have been identified using the bounding box approach. This means that critical habitat is not comprised of the entire area within the identified boundaries but only those areas within the identified geographical boundaries where the described biophysical feature and function it supports occur, as described in Table 2. Note that this approach differs from the approach described in Part 2, section 4.0, which states that an area of occupancy approach was used to identify critical habitat."

It is also contradicted by the critical habitat maps (**Figures 3-18, Appendix D**), which identify only stream networks within which critical habitat can be found, but do not identify specific locations of critical habitat. It is also contradicted by descriptions of critical habitat locations in

Tables 5-8 of Appendix D, which appear to identify lakes and stream reaches between specific points as critical habitat, but could also be interpreted to mean only the specific points themselves as critical habitat.

The definition of critical habitat is crucial not only for its conservation implications, but because critical habitat is enforceable, with severe penalties for destroying any part of it. Because the descriptions and identifications used in this Proposed Recovery Strategy-Action Plan are incomprehensible and contradictory, critical habitat will be unenforceable, therefore contrary to SARA's critical habitat protection provisions.

At a minimum, critical habitat must be clearly defined to include all of the water bodies and watercourses occupied by pure populations, including the watershed upstream from the lowest elevation in the drainage network in which pure populations can be found, all the way to the watershed divide, including, but not restricted to, terrestrial habitat in the riparian zones of that stream network. Critical habitat must also include the critical habitat of near-pure populations essential to the recovery of Alberta's westslope cutthroat trout, and any waterbodies or stream networks required for reintroduction, or for the introduction of archival populations, all essential for recovery of the species in Alberta.

Identification of critical habitat must include its geographic location, to make it enforceable. The maps (**Figures 3-18, Appendix D**) do not show the location of critical habitat within the stream networks, so the SARA critical habitat provisions cannot be enforced.

PDF pp.23-24, Defining riparian critical habitat areas: This is an important addition to the definition of critical habitat since the 2014 Recovery Strategy.

"The identification of riparian critical habitat was informed by DFO 2009 and scientific information related to riparian buffers. Critical habitat includes all riparian areas on both stream banks for the entire length of the stream segments and all banks of waterbodies identified as critical habitat."

Please include citations to the scientific information related to riparian buffers that were used. Please make use of USEPA (2015), which provides an unusually thorough review of the science relevant to this topic, and itself has been unusually thoroughly peer-reviewed. The most reasonable conclusion to be drawn from USEPA (2015) is that the entire watershed above and including the lowest-elevation point of critical habitat in or under the channel network is itself critical habitat. The entire watershed drains to the waters actually occupied by the fish, so directly affects it. This constitutes the best available information as required by SARA s.41(1)(a).

Final paragraph, PDF p. 23 Defining riparian critical habitat areas:

"The width of the riparian area required to protect the attributes of critical habitat for Westslope Cutthroat Trout has not been quantified, however the riparian area must be sufficient to maintain clean, cold water, sediment and silt free substrates, and provide inputs of food (invertebrates) and woody debris into the aquatic environment."

This statement contradicts the statement in the next paragraph, following page, that

"The width of the riparian area (Appendix C. Figure 2) within the areas designated as critical habitat are continuous and extend horizontally from the high water mark to a width of 30 metres on both banks of the waterbody for the entire geospatial area."

The use of a 30 m limit on each side of the channel to identify the riparian zone is identical to the minimum 30 m buffer zone specified in most operating ground rules for logging companies used by Alberta Agriculture and Forestry, and is less that that specified for Alberta's Class A Waters, suggesting that, contrary to a statement in the Preface (p.iii) and to a requirement of SARA, socio-economic factors *were* considered in the identification of critical habitat. The riparian zone part of the critical habitat identification shows signs that political considerations were included in the decisions made. Let the politicians make such decisions. DFO's job always, and certainly under SARA, is to provide the best available scientific information and advice. If any science went into making this decision, please cite it and indicate where it may be acquired.

The riparian zone, which must include any floodplains (Hauer *et al.* (2015), is readily identifiable in many cases, often from an examination of satellite imagery. Alberta's LIDAR Wet Areas database would undoubtedly be useful in setting boundaries to the actual riparian zone on all watercourses, especially when supplemented in difficult cases with ground truthing by a qualified professional. The arbitrary 30 m buffer should be retained only as a minimum standard where better determinations are unavailable. Whatever the case, the most scientifically supportable approach is to recognize the watershed as the appropriate unit defining critical habitat, as described above, in which case a strict definition of the riparian zone is not required.

PDF p. 24, final paragraph:

"Note that not all attributes in Table 2 must be present in order for a feature to be identified as critical habitat. If the features as described in Table 2 are present and capable of supporting the associated functions, the feature is considered critical habitat for the species, even though some of the associated attributes might be outside of the range indicated in the table."

This is confusing. If **Table 2** doesn't contain the full range of attributes, it is inadequate for use as defining critical habitat for conservation and enforcement purposes. The *stream network* itself within the ranges identified in the maps and tables (**Figures 3-18, Tables 5-8, Appendix D**) is critical habitat. The fish either use all of it at some part of their life cycle, or they and the habitats they occupy are directly affected by it. **Table 2** at best provides guidelines to identifying the kinds of habitat that the fish use for particular purposes. The attributes of specific locations change substantially with natural changes in flow, ice conditions, water temperature, and other environmental variables, making defining the location of critical habitat impossible if the definition must satisfy the attributes in **Table 2**. Rather than allow for any irreconcilable argument from this cause, define critical habitat unequivocally, along the lines I suggest above, as the stream network occupied by pure populations or needed for

recovery, and the terrestrial environment draining into it. Don't make Table 2 the sole description of critical habitat, as it now appears to be, or critical habitat will be unenforceable.

PDF p. 26 Critical habitat geographic information:

"The critical habitat's functions, features and attributes have been identified using the bounding box approach. This means that critical habitat is not comprised of the entire area within the identified boundaries but only those areas within the identified geographical boundaries where the described biophysical feature and function it supports occur, as described in Table 2. Note that this approach differs from the approach described in Part 2, section 4.0, which states that an area of occupancy approach was used to identify critical habitat."

See my remarks above concerning the need under SARA to have an enforceable definition of critical habitat. This statement seriously confuses what is critical habitat for westslope cutthroat trout and what is not. It does not even include the riparian zone as part of critical habitat, after devoting a section previously to how the riparian zone is important to critical habitat, and why it must be included in that designation. I have been unable to find any reference to the so-called "bounding box" approach to critical habitat designation other than a very few DFO documents on, as I recall, whales. Could you please direct me to where the bounding box approach has been treated in the peer-reviewed literature? I have been unable to find it except in reference to network design.

For this species, area of occupancy supplemented with data on riparian and upstream influences is the appropriate basis for defining critical habitat. Table 2 provides a guide to some specific features of typical critical habitat for westslope cutthroat trout, but is not definitive.

"The areas identified as critical habitat are areas that, based on best available information, the Minister of Fisheries and Oceans and the Minister responsible for the Parks Canada Agency, consider necessary to partially achieve the species' population and distribution objectives required for the survival and recovery of the species. Maintaining current reaches of genetically pure westslope cutthroat trout will likely be insufficient to ensure viable populations in the long-term."

First, you just shot down the "areas identified as critical habitat" in the previous paragraph. You no longer have such areas: you said that only places having the attributes listed in **Table 2** are critical habitat, and you provide zero locations for those, other than a vague reference to somewhere in the stream networks coloured pink in the maps. This confusion is a crucial problem, and needs to be fixed.

Second, **the point about the insufficiency of currently identified critical habitat for maintaining pure cutthroat populations** is the essence of the conservation problem you face, yet your strategy and action proposals fail to address this essential issue as the most important thing you must solve. This is not just a longterm problem, it is an immediate problem. These remnant stocks are so small and isolated that they are deteriorating genetically with every spawning season. They are at unacceptably high risk of extinction *now* from random accidents. They are going extinct *now* (Evan-Thomas population). They are in steep decline *now* (Silvester

Creek population). Their critical habitats are being disrupted *now* (Mayhood 2013, 2017; Erdle and Mayhood 2014). Address this problem *now* in this Proposed Recovery Strategy-Action Plan as if it is the key issue. Because it is.

PDF p. 26 4.2 Schedule of studies to identify critical habitat (Table 3): The principal identifier of critical habitat is the location of genetically pure populations. Find those locations, and the job is largely done. Place that first, separately, in **Table 3**. The stuff about studying the details of critical habitat features is useful, but not as important. Place it somewhere down the table, maybe in connection with identifying habitat for archival populations, where it *is* very important.

Your second set of studies, to identify suitable habitats and identify areas where genetic recovery is possible, is appropriately placed, but I suggest wording it as identifying suitable habitats where known remnant populations can be expanded. Small population size is the best single predictor of extinction (O'Grady *et al.* 2004) for good reason. To deal with your need for genetic recovery, prioritize expanding additional secure habitat in the downstream direction where the situation permits you to re-link adjacent, historically connected but now separate remnant populations. This requires considerable population genetics expertise to determine risks, so hire the best, but the idea is that, if you must introduce new genetic material to increase gene diversity, intuitively it would seem best to restore gene flow among populations that were once connected.

I would drop studies to determine width of riparian habitat in favour of identifying the watershed as including the terrestrial part critical habitat for reasons discussed above, in which case the studies are not needed.

"Knowledge of critical habitat's thresholds of tolerance to disturbance from human activities is lacking" (**Table 2**)

Knowledge is always lacking to some extent, but you should at least recognize and use the information that is available. For example, one of the major impacts on critical habitat arises from fine sediment delivery to streams. There exists peer-reviewed information to assess population level effects on salmonids sufficient to make reasonable decisions on limiting that problem (see e.g., Mayhood 2013). Your first study on tolerance thresholds should be literature reviews. There is likely to be a lot of useful material already available.

Also, don't get too insistent on finding scientifically supportable thresholds. There are few. For example, Ripley *et al.* (2005) showed that the probability of finding bull trout in a watershed decreased immediately with *any* level of clearcutting or road development. Similar immediate declines in an abundance surrogate of westslope cutthroat trout related to road development are apparent in the data of Valdal and Quinn (2010). There were no thresholds. Any thresholds to be imposed will likely be politically determined: How much damage can we do before someone sues? In the case of SARA-listed species, *any* destruction of critical habitat is a violation subject to potentially severe fines or even incarceration. That's the threshold, and it's being exceeded everywhere, especially by the Alberta Government in the way it manages land.

PDF p 27 4.3 Activities likely to result in the destruction of critical habitat: Provide a rationale for including only those threats with an overall significance of high as activities likely to result in the destruction of critical habitat. The concern is that even those threats judged to be of low significance overall could have very high significance for certain populations. All populations need to be recovered to retain as much genetic diversity and local adaptation as possible. The loss of even one remnant stock is a major issue.

Table 4 culvert structures: Culverts do not just affect movement. They are major sources of fine to coarse sediment when they blow out, as they inevitably do: most are designed only for a 25-year event or smaller. Crossings by means of culverts essentially load the channel like a sediment gun, ready to go off with the next significant flood or plug-up. For example, the Highway 3 culvert crossing of Girardi Creek critical habitat has a long record of plugging up, spilling the critical habitat creek down the Highway 3 ditch, and substantially dewatering the stream below the highway. This is an example of a major threat unrecognized in this table, except as it affects movement. It also needs to be fixed as soon as possible. There was a plug-up in 2014, I understand from a local person, and again in 2017 (Mayhood 2017). When I asked a senior member of the recovery team last March what was being done to deal with the problem, he informed me that he was relying on Alberta Transportation to fix it. That's not good enough. Alberta Transportation has no authority to conserve cutthroat trout; DFO does.

Table 4 Linear disturbance: Linear disturbances deliver more fine sediment with higher traffic, but their mere existence is an erosion and sediment delivery threat. Maintenance done without adequate protective measures can actually increase the problem. Removal of major parts of the linear disturbance network on the East Slopes is long overdue, and what has been proposed is nowhere near adequate. Maybe you should include government and public resistance to environmental protection as a major threat when reclamation of linear disturbances is involved.

PDF p. 34 5.4 Benefits of implementing the recovery actions: I think this section could be significantly strengthened by considering in greater detail the outcome of a successful recovery program. Pure westslope cutthroat populations in the Flathead and Kootenay river systems in Montana and British Columbia, and in the Clearwater and Salmon river drainages in Idaho, are major high-value sport fisheries that support a significant part of the tourism and recreation industries in those jurisdictions. The total resource value of the catch-and-release angling fishery for native trout in Yellowstone National Park alone was estimated at $61.7 million USD annually in the late 1980s (Jones *et al.* 1989). Simply watching trout in selected locations that can support it is an enormous attraction to visitors and residents alike. Viewing native trout has been extremely popular at Fishing Bridge and LeHardy Rapids in Yellowstone (Jennings 1980 and Jones *et al.* 1989 give numbers and hours spent), and in Glacier National Park (Spencer *et al.* 1991). Seek out recent data from these and other similar jurisdictions. Additionally you may be able to give a rough estimate of the value of ecosystem services from restored westslope cutthroat trout populations (Costanza *et al.* 2014, 2017).

PDF p. 35 7. Activities permitted by the recovery strategy-action plan:

"The COSEWIC status assessment for Alberta Westslope Cutthroat Trout only considered genetically pure populations within its original distribution in Alberta; therefore, the SARA prohibitions relating to individuals only apply to genetically pure populations within the original Westslope Cutthroat Trout distribution."

Near-pure populations and their critical habitats are also protected by SARA when they are designated as part of the recovery strategy, because they are considered to be essential for the recovery of the species.

PDF p. 37 Research permits:

"Note that sport fishing licenses issued under the Alberta Fishery Regulations or the National Parks of Canada Fishing Regulations cannot be used to conduct activities such as scientific sampling for Westslope Cutthroat Trout. A SARA, section 73 permit must be obtained prior to these activities."

What is the significant problem for which this provision is a solution?

These provisions should be removed or clarified. If the latter, include a definition of what you feel constitutes research under this provision. Only activities that cause substantially more risks than permitted by sport fishing can be made to require a s.73 license.

The purposes of SARA include providing protection for species at risk and supporting the conservation efforts of individual Canadians and communities. It is not a purpose of SARA to restrict for frivolous, secret or unspecified purposes, information gathering by citizens, or to silence dissent. A rule against keeping systematic records of protected fish species caught while using a sport fishing license would restrict the conservation efforts of citizens without offering any benefit to the species. It is an unlawful use of SARA to restrict research only to stymie citizen monitoring intended to assess the success (or not) and validity (or not) of government recovery actions.

Sport fishers engaged in making routine, rigorous records of recreational angling catches, and analyzing those records, should be encouraged. Such activities should form part of the citizen outreach provisions of this Recovery Strategy-Action Plan.

PDF p. 44-68 Maps and tables of critical habitat: Please cite, and make available, the research supporting these designations. Without the data and technical interpretation it is not possible to assess their validity and completeness. This document is supposed to be science-based. If it's not written down, it's not science. Some provisions also may not be enforceable without the scientific support for them. Some examples of the problems arising from the lack of proper documentation follow.

All designated, and sampled undesignated, critical habitat: Where are the data supporting the designations of critical habitat? Just as important, where are the data supporting the decision NOT to designate sampled locations as critical habitat?

Figure 3. Upper Consolation Lake is shown as critical habitat. Formerly this lake held only brook trout (Mayhood and Anderson 1976). What is the rationale for the designation?

Figure 9. What is the rationale for removing certain upper tributaries of Blairmore Creek and upper Allison Creek from their former status as near-pure protected populations?

Figure 12. What is the rationale for including Wilkinson Creek as critical habitat, which holds a stock of pure westslope cutthroats introduced from the Job Lake broodstock? This stock is not protected under SARA.

Figure 13. What is the rationale for designating "Lusk" Creek as critical habitat? There is a Lusk Creek immediately over the divide from this one in the Kananaskis drainage. Is this a mistake, or are there really two Lusk Creeks so close together? Do you have genetic data from the Lusk Creek shown here, or is it being designated as critical habitat for recovery purposes?

Figure 14. The Evan-Thomas Creek population has been extirpated. The stream below the barrier falls now lacks sufficient overwintering habitat after the 2013 flood. The stream above the falls lacks fish, as I understand it, but may have adequate habitat to support an archival population (one intended to preserve a genetic line from elsewhere). At least two tributaries above falls may also have suitable habitat, although they are very small. What is the rationale for designating this creek as critical habitat?

Figure 18. What is the rationale for failing to link up the Corral Creek and upper Willow Creek critical habitats, which are only 2.2 km apart via small channels? Linking them might improve gene flow and hence survival of both stocks.

Tables 5-8. Please make it clear that critical habitat is not just at the location points (which is how these tables can be read), but includes the channels between points. For example, state that P1 is the upstream boundary of critical habitat, and P2 the downstream boundary of critical habitat in each case. This is a potential problem affecting enforceability of the critical habitat protection provisions.

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Boulanger, Chantel

From: Dong, Stephanie
Sent: Monday, July 15, 2019 12:05 PM
To: Hogan, Kristina S
Cc: Mclarens, Scott; Hoggarth, Thomas
Subject: Cancelling of input request for 2019-001-01762 Skrajny

Good afternoon Kristina,

Hope all is well!

After consulting with SARA NHQ, it was determined that a response would not be needed for 2019-001-01762.

Thank you though for your help with this!

Hope you have a great week,

Stephanie Dong

Writer/Editor, Ministerial Correspondence Unit
Fisheries and Oceans Canada / Government of Canada
stephanie.dong@dfo-mpo.gc.ca / Tel: 613-296-9176

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XNCR-GrpCA/AC@dfo-mpo.gc.ca to contact all MCCU Analysts / pour rejoindre tous les analystes d'UCCM

Boulanger, Chantel

From: Mclarens, Scott
Sent: Monday, July 15, 2019 11:03 AM
To: Kapi, Nancita
Cc: Godby, Leah; Dong, Stephanie; Boulanger, Chantel; Gray, Jessica
Subject: 2019-001-01762 - MCU tasking confirmation
Attachments: MECTS-#4074126-v1-Main_Docs_2019-001-01762.PDF

Hi Nancita,

MCU believe the attached to be related to an ongoing consultation. MCU have received a further 15 letters on this subject. I note that most have been sent to SARA, with a cc to the Minister.

Usually with consultations, MCU does not take the lead on a response, rather, we share the incoming with the relevant sector or region for information.

Can you please confirm whether this is a consultation? If so, MCU will not process these dockets further.

Thank you very much,

Scott McLarens

A/Team Lead, Ministerial Correspondence Unit
Fisheries and Oceans Canada / Government of Canada
scott.mclarens@dfo-mpo.gc.ca / Tel: 613-990-9950

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2019-001-01762

July 10, 2019

Director
SARA Directorate
Department of Fisheries and Oceans Canada
SARA/LEP.XNCR@dfo-mpo.gc.ca

The Honourable Jonathan Wilkinson
Minister, Department of Fisheries and Oceans Canada
min@dfo-mpo.gc.ca

Comments on Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*) in Canada

Dear Director,

Alberta Wilderness Association (AWA) appreciates the opportunity to provide comments on the proposed *Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada*.

Alberta Wilderness Association (AWA) works throughout Alberta towards more representative and connected protection of Alberta's landscapes that are the source of our abundant clean water, clean air and vital habitat for wildlife in each one of six natural regions. With over 7000 members and supporters, AWA remains committed to assuring protection of wildlife and wild places for all.

In general, while AWA appreciates the long overdue release of the proposed Recovery Strategy and Action Plan (RS-AP) and the preliminary identification of additional critical habitat, AWA believes that the proposed RS-AP, as written, is insufficient to protect and maintain - let alone recover - westslope cutthroat trout. The proposed plan is plagued by obfuscating language, is missing clarity on many key issues, and lacks concrete on-the-ground actions and recovery goals. In addition, AWA has serious concerns with the proposed "bounding box" approach to defining critical habitat.

2-3. Population and Distribution Objectives, Strategies and Recovery Actions

As currently written, the RS-AP is continuing to perpetuate a "plan to plan" by committing only to continued information gathering and planning. Work on updating genetic information and identifying work priorities has been ongoing for at least the past 2-3 years. Including these items as the primary focus of this plan, especially given that this plan is more than 4 years overdue is unacceptable. Information gathering, while important, will not recover or prevent the further decline of westslope cutthroat trout. **Action is required now.**

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The RS-AP must identify where work is to occur within discrete time increments (such as 5 year periods) and what will need to occur in order to successfully recover westslope cutthroat trout, beginning with those populations where recovery work is most needed.

Concrete actions and quantifiable recovery targets, including the following, should be the focus of the RS-AP:

Short Term (Years 1-5):

- **Develop and implement a monitoring plan:** As it currently stands, monitoring of westslope cutthroat trout is occurring on an ad-hoc and infrequent basis. As a result, the status of each population is unknown and declines are not being detected. At a bare minimum, the RS-AP must contain a plan and the funding to routinely monitor and report on the status of all remaining westslope cutthroat trout populations. The abundance, distribution and genetic integrity of each population must be determined on a routine basis. Monitoring should be robust enough so that any trends detected will be statistically sound, and results should be publicly available.
- **Rescue/recover the most vulnerable populations:** The RS-AP must plan to immediately begin recovery of the most vulnerable remaining populations of westslope cutthroat trout, such as those exposed to high angling pressures or under risk of hybridization. In particular, **how will Fisheries and Oceans Canada (DFO) protect and recover the last remaining fluvial populations of westslope cutthroat trout**, such as the ones in the Upper Oldman/Livingstone and in the Castle?
- **Expand and enforce protections:** An expansion of critical habitat is necessary in order to achieve recovery of westslope cutthroat trout (see critical habitat, below). However, this expansion of critical habitat must be more than symbolic. DFO must halt any activities with the potential to negatively impact westslope cutthroat trout habitat and abundance. An increase in enforcement capacity in order to ensure westslope cutthroat trout are actually protected is required.
- **Complete on-the-ground assessments of all habitat and prioritize areas for habitat restoration:** Once a habitat restoration plan is completed, recovery work can be aided by NGO partners.
- **Stabilize all remaining westslope cutthroat trout populations:** Until more extensive recovery actions can be undertaken, DFO must stop the further decline of the distribution and abundance of all remaining populations.

Mid Term (Years 5-10): Complete the recovery of at least 10 populations across the species' range
Long Term (30 years): Achieve the recovery of westslope cutthroat trout

In addition, the following pieces of information must be included within the RS-AP:

- What does DFO consider to be a "population"? Where are remaining populations located and what is their current status?
- What are the main threats currently facing each population? What actions must be undertaken in order to address them?
- What is the desired final distribution, number of adult individuals, and genetic status of each population when recovered?

Phone: 403.283.2025

- Where will westslope cutthroat trout be re-introduced and expanded, and from what population?
- Clear, scientifically defensible definitions of "core", "conservation" and "self-sustaining" are required
- A feedback mechanism is required by which recovery work is monitored and reported upon and successes/failures are used to improve future recovery actions.

4. Critical Habitat

AWA does not support the bounding box approach as described in the proposed RS-AP, as this approach is easily abused and would likely perpetuate the further destruction of westslope cutthroat trout habitat. Due to the lack of available on-the-ground data, it is easy to imagine a hypothetical situation wherein a proponent destroys critical habitat, only to claim that those features did not exist in the first place. Since westslope cutthroat trout rely on the entire stream and its upland headwaters for their survival, it is erroneous to plan that only certain portions of a stream that contain certain attributes need to be protected, especially given the highly dynamic and changeable nature of headwaters streams.

Westslope cutthroat trout cannot sustain further habitat degradation; the populations that remain live in fragmented and isolated areas that are often already highly disturbed. AWA believes that **permanent protection must be afforded to the water bodies identified within Appendix D, along with the upland areas that sustain them:**

- Instream Habitat: We support the expansion of instream critical habitat and the inclusion of unnamed tributaries within those stream segments. These tributaries must include both ephemeral and permanent (mapped and unmapped) water bodies that feed water into westslope cutthroat trout streams. As with land uses adjacent to critical habitat, anything that occurs upstream of critical habitat impacts downstream ecosystems and may destroy critical habitat if improperly protected. In addition, AWA is concerned with the inconsistent approach with which the instream sections of critical habitat have been identified. **Some near-pure populations of westslope cutthroat trout have been omitted.** If AEP's Genetic Delineation product was the basis for critical habitat identification, then that information must be published as well as an explanation of how it was used.

- Floodplain and Upland Areas: AWA has long maintained that riparian areas are necessary to the survival and recovery of westslope cutthroat trout, and we support the addition of riparian areas to critical habitat. Most of the instream attributes outlined in the proposed Recovery Strategy as essential parts of westslope cutthroat trout critical habitat – clean cold water, sediment/silt-free gravel substrate, large woody debris – depend entirely on healthy riparian habitat function. Westslope cutthroat trout are particularly sensitive to riparian habitat. The current degraded quality of riparian vegetation adjacent to instream habitats has resulted in decreased quality of westslope cutthroat trout habitat and has likely compromised their persistence. Restoration of degraded riparian areas should be a key action recommended within the RS-AP.

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AWA believes that using an arbitrary number (such as 100m) is insufficient and that at minimum the entire floodplain – which, by definition encompasses the riparian area - must be included as the riparian portion of westslope cutthroat trout critical habitat. **We strongly disagree with the RS-AP's assertion that a 30m riparian buffer is a "reasonable" approach.** More protective measures are already being used in practice in many instances and yet westslope cutthroat trout remain in jeopardy. For example, as the primary industrial-scale logging company within westslope cutthroat trout critical habitat, Spray Lake Sawmills is already required to treat any water body where westslope cutthroat trout are found as Class 'A' (not permitted within 100m of the high water mark) as part of its Operating Ground Rules. In addition, under the Livingstone-Porcupine Land Footprint Management Plan, motorized access within 100m of streams has been severely restricted due to the provincial government's recognition of the impacts of riparian disturbance on trout populations.

An integral part of a river is the shallow connected groundwater in the floodplain beyond its active channel. Gravel-bed river floodplains are critical for healthy and functioning ecosystems, where water can travel hundreds of meters out from the river channel. These saturated underground gravels deliver cold, oxygen-rich water to the river system year-round, which is critical for the survival and recovery of native fishes, supports an abundance of vegetation and is relied upon by bird species[1].

Due to the interconnectedness of the floodplain and visible river channel, streams and rivers are constantly moving and shifting, which can affect the habitat quality of westslope cutthroat trout. If a stream has a 100m buffer between the flowing water and industrial activities or roads, but during a flooding event the waterbody shifts 60-70 metres, only a very small vegetation buffer is left to prevent erosion and sedimentation, and this causes key threats to trout survival. Natural channel meandering is important for the health of aquatic ecosystems and this only occurs if the flood plain is protected from vegetation loss. **Therefore, the entire floodplain must be included as critical habitat for westslope cutthroat trout** to accommodate movements in the stream channel and ensure critical habitat remains sufficient for the recovery of this species and their long term survival.

As with activities that occur within the floodplain, upstream activities such as industrial scale logging and linear disturbances can impact downstream water quality and adversely affect remaining westslope cutthroat trout populations, as well as prevent successful re-establishment in candidate streams. **AWA implores DFO to consider the inclusion of the entire watershed as westslope cutthroat trout critical habitat, particularly for the remaining fluvial populations.**

- Groundwater: Groundwater is important for stream flow regulation (maintaining stream flows within the range of natural variability), reducing water temperature fluctuations, and ensuring sediment loads to receiving streams are minimized. The interaction between ground water and

[1] Hauer, F.R., Locke, H., Dreitz, V.J., Hebblewhite, M., Winsor, H.L., Clint, M., Nelson, C., Proctor, M.F. and R. Stewart. 2016. Gravel-bed river floodplains are the ecological nexus of glaciated mountain landscapes. Science Advances 2. 10.1126/sciadv.1600026.

surface water creates a more stable quantity of water flowing downstream by acting as an underground sponge during flooding and ensuring continual flow during periods of drought. For a species like westslope cutthroat trout that relies on shallow headwater streams, this stability is essential.

Groundwater quantity and quality is also crucial for the wintering habitat of stream dwelling salmonids including westslope cutthroat trout. Winter flows can diminish to levels that essentially trap fish in deeper pools between the frozen riffles along streams. Clean, oxygenated groundwater influx acts as a recharge mechanism to ensure sufficient freshwater habitat for westslope cutthroat trout over winter months. Thus we strongly recommend that the critical habitat identification for westslope cutthroat trout includes any and all areas within the watershed responsible for groundwater storage and recharge regardless of distance from a watercourse.

The *Species at Risk Act* does not permit the inclusion of socio-economic impacts as part of the assessment of critical habitat. **We see no biological reason to adopt the bounding box approach and exclude these important and well known landscape elements that AWA has listed above from the critical habitat identification of westslope cutthroat trout.**

The protection of fisheries requires the ongoing maintenance of freshwater and riparian ecosystem health. There needs to be an emphasis on watershed management as a function of critical habitat and westslope cutthroat trout need to be managed as one ecological unit in a dynamic environment for a successful recovery. Riparian buffers, active floodplain areas, areas necessary for groundwater storage, historically occupied capable/restorable habitat and upstream tributaries must be included as critical habitat for westslope cutthroat trout.

3.2 Actions already completed or underway

Currently, Fisheries and Oceans Canada has failed to report on steps made to protect westslope cutthroat trout critical habitat and the effectiveness of recovery measures. Even basic information such as the status and health of each remaining population and actions to be undertaken in the coming fiscal year, are not published. What is the trend in westslope cutthroat trout distribution and abundance since the publication of the first Recovery Strategy? What populations have had recovery work completed and what were the impacts on population abundance and distribution? Without basic checks and balances, westslope cutthroat trout can and will be mismanaged into non-existence.

4.3 Activities likely to result in the destruction of critical habitat

Given the imperiled status of westslope cutthroat trout, AWA believes that a more precautionary approach to the protection of critical habitat is warranted. As currently written, the RS-AP purposefully omits pollution, grazing and forest harvest as having the potential to destroy critical habitat. It is the cumulative impact off all activities – both large and small – that have driven population declines of westslope cutthroat trout. Cherry picking which activities will be considered as potentially damaging is unacceptable, especially given DFO's recognition that "knowledge of [...] critical habitat's thresholds of tolerance to disturbance from human activities is lacking".

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7. Activities permitted by the RS-AP

Given that incidental mortality from catch and release angling may be a threat to the survival and recovery of westslope cutthroat trout in some watersheds, DFO may need to reconsider its blanket approval of this activity, at least within areas identified as critical habitat.

Without a comprehensive action plan, AWA believes that individual WSCT populations will be driven to extinction, with grave consequences for recovering the species in Alberta. We thank you for your serious consideration of these comments and look forward to seeing these recommendations incorporated into the final Recovery Strategy – Action Plan for the Alberta population of westslope cutthroat trout.

Sincerely,

ALBERTA WILDERNESS ASSOCIATION

Joanna Skrajny, Conservation Specialist

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s.19(1)

Minister / Ministre (DFO/MPO)

From: Joanna Skrajny <[redacted]
Sent: Wednesday, July 10, 2019 12:05 PM
To: NCR SARA / LEP RCN (DFO/MPO); Minister / Ministre (DFO/MPO)
Subject: AWA Comments on Recovery Strategy and Action Plan for AB Westslope Cutthroat Trout
Attachments: 20190710_lt_awa_dfo_wsct_rsap.pdf

Dear Director and Minister Wilkinson,

Alberta Wilderness Association (AWA) appreciates the opportunity to provide comments (attached) on the proposed *Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada*.
We appreciate your careful review of our submission and look forward to your response.

With regards,
Joanna Skrajny
Conservation Specialist
Alberta Wilderness Association

"Defending Wild Alberta through Awareness and Action"

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s.19(1)

Watson, Ernest

From: Chiu, Scott on behalf of NCR SARA / LEP RCN (DFO/MPO)
Sent: Wednesday, July 17, 2019 3:51 PM
To: Watson, Ernest
Subject: FW: Proposed Recovery Strategy - Action Plan for Westslope Cutthroat Trout (Alberta populations) under the Species at Risk Act
Attachments: WSCT Letter 2019.pdf

From: Ed Kulcsar <[redacted]
Sent: Wednesday, July 17, 2019 4:49 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Subject: FW: Proposed Recovery Strategy - Action Plan for Westslope Cutthroat Trout (Alberta populations) under the Species at Risk Act

Based on the email string our response to the proposed recovery strategy was sent to Mr. Watson. I thought I would forward our response to the general email address to ensure our input is considered. Thank you.

Ed Kulcsar
Vice President, Woodlands
Spray Lake Sawmills
office: 403.851.3311
mobile: 403.669.1526
www.SprayLakeSawmills.com
www.TopSpray.com

The Forest is our Future

From: Ed Kulcsar
Sent: Saturday, July 13, 2019 2:35 PM
To: 'Watson, Ernest' <Ernest.Watson@dfo-mpo.gc.ca>
Subject: RE: Proposed Recovery Strategy - Action Plan for Westslope Cutthroat Trout (Alberta populations) under the Species at Risk Act

Ernest

Attached is a letter of our comments of the proposed recovery strategy for WSCT. Thank you for the opportunity.

Ed Kulcsar
Vice President, Woodlands
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The Forest is our Future

From: Watson, Ernest <Ernest.Watson@dfo-mpo.gc.ca>
Sent: Wednesday, May 08, 2019 9:17 AM
To: C&A SARA Consultations / C&A LEP Consultations (DFO/MPO) <fwisar@dfo-mpo.gc.ca>
Subject: Proposed Recovery Strategy - Action Plan for Westslope Cutthroat Trout (Alberta populations) under the Species at Risk Act

Greetings:

Fisheries and Oceans Canada is providing advance notice of the intent to post a ***proposed*** version of the Recovery Strategy - Action Plan for the Westslope Cutthroat Trout, Alberta populations (the Plan) to the SARA public Registry on or around May 14th, 2019.

The Westslope Cutthroat Trout, Alberta populations was designated as Threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 2005. The status was re-examined and confirmed in 2006 and 2016. The Westslope Cutthroat Trout, Alberta population was listed as Threatened under Canada's *Species at Risk Act* (SARA) in November 2013. In 2014, a federal recovery strategy, which adopted the *Alberta Westslope Cutthroat Trout Recovery Plan* 2012-2017, was published as final on the species at risk public registry. SARA requires an action plan will be completed.

The proposed Plan is a document which combines an amended recovery strategy and an action plan, rather than a stand-alone action plan. It summarizes projects and activities to meet recovery strategy objectives and goals, and includes information on habitat, details of protection measures, and an evaluation of socio-economic costs and benefits of implementation. The Plan includes additional geospatial extent of critical habitat to what was identified in the 2014 recovery strategy.

Once the proposed Plan is posted to the SARA public Registry (https://www.sararegistry.gc.ca), the document will be open for a 60-day comment period. Fisheries and Oceans Canada will review comments and integrate them as appropriate, after which the final version will be posted on the Public Registry.

Sincerely,

Ernest Watson

Team Leader, Species At Risk Program
Fisheries and Oceans Canada / Government of Canada
ernest.watson@dfo-mpo.gc.ca / Tel: 204-983-0611

Biologiste principal des espèces en péril, Programme des espèces en péril
Pêches et Océans Canada / Gouvernement du Canada
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Spray Lake Sawmills

July12, 2019

Ernest Watson
Team Leader, Species at Risk Program
Fisheries and Oceans Canada
Government of Canada
ernest.watson@dfo-mpo.gc.ca

Dear Mr. Watson:

Re: Proposed Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout in Canada

Thank you for this opportunity to provide feedback on the above noted proposed recovery strategy for the Westslope Cutthroat Trout (WSCT). Spray Lake Sawmills (SLS) has a long and proud history as a family owned and operated company in Alberta. We have a 76-year history of responsible forest management and take our role as stewards of the forest seriously. As such, we continue to support the recovery efforts for pure-strain WSCT and agree in principle with the content of the proposed strategy for the most part.

To be effective a recovery strategy and action plan must be focussed. To that end, SLS agrees with the definition of a residence as stated on page 3; "*a red is considered to be the residence of this fish. The residence is limited to the redd itself and the spawning and incubation time period during which eggs and alevins are present in the redd structure.*" SLS also agrees with the residence statement on page 4. "*Residence for this species only occurs within the population of genetically pure Westslope Cutthroat Trout and is restricted to area designated as critical habitat.*" This provides clear focus. As well, the population objective as stated on page 4 is supported; "*Protect and maintain the existing distribution of ≥ 0.99 pure populations..*" Given limited resources, SLS believes that pure populations should be the focus and showing significant recovery before looking for opportunities for near-pure populations.

SLS supports the definition of critical habitat and the area of occupancy approach as defined in the 2014 Recovery Strategy. Page 5 of the 2014 Recovery Strategy states "*Critical habitat for Alberta populations of Westslope Cutthroat Trout is identified as all areas of bankfull waterbodies currently occupied by naturally occurring, pure-strain populations within the original Westslope Cutthroat Trout distribution.*" The 2014 Recovery Strategy goes on to state "*Only the areas occupied by genetically pure Westslope cutthroat Trout populations are considered critical habitat not the entire waterbody in which they exist.*"

The 2014 critical habitat definition and occupancy approach addresses the primary reasons for the decline in pure-strain WSCT. Page 21 of the 2014 Recovery Strategy indicates the "*primary threats to the survival and recovery of Westslope Cutthroat include hybridization (loss of Westslope Cutthroat Trout genetic materials) with Rainbow Trout (Oncorhynchus mykiss) and competition with other species such as Brook Trout (Salvelinus fontinalis) and Rainbow Trout.*" Therefore, focussing critical habitat as defined in 2014 is a reasonable and effective approach.

The Proposed 2019 Recovery Strategy is too subjective, open to interpretation and therefore could be unduly restrictive on our forest management activities. The definition on page 13 of the 2019 Recovery Strategy starts off stating "*all areas currently occupied by naturally-occurring pure strain populations*" which is a consistent, objective definition. However, it goes on to state "*including areas on which Westslope Cutthroat Trout depend* ***indirectly*** *(e.g. riparian areas)...and areas where genetically pure populations of the species formerly occurred and has the potential to be reintroduced.*" There are currently no scientifically replicable or defendable definitions of "indirectly" and "potential" (as indicated later in the 2019 Recovery Strategy) and we are very concerned about having our forest management activities unnecessarily restricted for little benefit to the WCST genetically pure populations.

Further to this we submit the definition of Instream Critical Habitat should be limited to areas currently occupied by genetically pure WSCT. As outlined in Table 3 assessments are to be completed in the next 4 years. Areas upstream of pure populations should not be automatically added to critical habitat without assessment of the instream habitat to validate if it can support WCST. Likewise, unnamed tributaries should not be included as critical habitat without assessment to determine if they contain pure strain WSCT, residences or have instream habitat capable of supporting WSCT. Many tributaries are non-permanent, do not have the necessary habitat features to support WSCT and therefore are not critical to the recovery of pure strain WSCT. SLS also does not agree with including areas with near-pure WSCT as critical habitat at this time. These near-pure populations may actually pose a risk to the pure populations rather than an opportunity. We submit that feasible strategies to change the purity level need to be developed and implemented before designating near-pure population reaches as critical habitat.

SLS agrees that riparian cover and in-stream structure are important components of aquatic habitat for the reasons stated on page 14 of the proposed recovery strategy. However, care must be taken in defining the extent of riparian cover to designate as critical habitat in the absence of scientifically quantified research. The recovery strategy proposes 30m buffers of the streams. Based on some research literature we have reviewed, SLS submits that a vegetation buffer of 15m is sufficient and if forested, a buffer of one tree height is more than sufficient "*to maintain clean, cold water, sediment*

and silt free substrates, and provide inputs of food (invertebrates) and woody debris into the aquatic environment."

Our concerns with the expansion of the definition of critical habitat are magnified by the greatly expanded Table 8 and the proposed requirement for review of proposed activities by Fisheries and Oceans Canada on page 15. While SLS was a part of the original recovery plan team and had information on the location of pure-strain populations of WSCT, we have not been consulted or shown the data to justify the greatly expanded number of creeks defined as critical habitat including creeks that previously were mapped as having hybridized populations of WSCT or no occupancy of WSCT. Rather than submitting our plans for review by DFO, we submit that the Alberta Timber Harvest Planning and Operating Ground Rules provide a reasonable and rigorous process for review and approval of forestry operations and this should be recognized in the recovery plan.

Some may use WSCT as a reason to expand protected areas and restrict activity but the motive is to achieve other objectives not directly related to the recovery of the pure-strain WSCT. Although activities on the landscape present a risk, the risk can and is being successfully mitigated through current Provincial/Federal regulations, policies and best management practices. Our forest management operations are successfully protecting WSCT habitat and we have developed a precautionary management strategy that supports recovery plan efforts. Expansion of the critical habitat definition as proposed in the 2019 Recovery Strategy would not be effective in addressing the survival and recovery of pure-strain WSCT and like protected areas, would increase the risk of stand replacing fire events that would threaten WSCT habitat.

To summarize, we support the recovery objectives for genetically pure Westslope Cutthroat Trout. However, we submit that critical habitat should be limited to stream reaches containing "residences" for pure-strain WSCT and reaches currently occupied by pure-strain WCST (purity ≥ 0.99). SLS would like to be a part of the process assessing creeks for pure-strain WSCT to ensure that limited resources are efficiently used in areas that will best benefit the recovery of the species.

Again, thank you for the opportunity to provide our thoughts and please do not hesitate to call if you have any questions or would like to discuss the recovery strategy further.

Sincerely,

Ed Kulcsar
VP, Woodlands

305 Griffin Road West | Cochrane, AB | T4C 2C4 | Phone: 403.932.2234 | Fax: 403.932.6675 | SprayLakeSawmills.com

s.19(1)

Boulanger, Chantel

From: Wilkinson, Jonathan - Assistant 1 <Jonathan.Wilkinson.A1@parl.gc.ca>
Sent: Monday, July 22, 2019 4:06 PM
To: Minister / Ministre (DFO/MPO)
Cc: Mitchell, Laura; Hill, Johanna; Mullan-Boudreau, Caitlin
Subject: Letter from [redacted] re: Alberta Population of Westslope Cutthroat Trout
Attachments: [redacted]Westlope_Cutthroat_Trout_11_07_2019.pdf

s.19(1)

11 July 2019

The Honourable Jonathan Wilkinson
Minister, Department of Fisheries and Oceans Canada
min@dfo-mpo.gc.ca

Subject: Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout in Canada

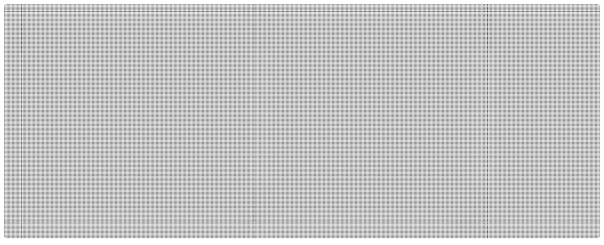
Dear Hon' Wilkinson,

I am very concerned with the lack of action to protect Westslope Cutthroat Trout. The recovery strategy does not provide an effective program of actions to protect the trout populations. Planing and reports do not help the trout and their habitat. The destruction of the streams continues every day, every weekend.

Your department should immediately declare critical habitat in the east slopes of Alberta. The damage by industry and Off-highway vehicles to Alberta's streams and consequently to the trout populations continues.

The current Alberta government is about to open more watersheds to more abuse by ATV's which have been shown to repeatedly ignore stream crossing restrictions. The time for federal action has been long overdue. Please tell me when you will declare critical habitat for this endangered species of trout.

Respectfully



Cc: Director, SARA Directorate
Department of Fisheries and Oceans Canada
SARA/LEP.XNCR@dfo-mpo.gc.ca

s.19(1)

Kapi, Nancita

From: Kate Lindsay <[redacted]>
Sent: Tuesday, July 23, 2019 10:17 AM
To: Phelps, Anne; Stewart, Julie; NCR SARA / LEP RCN (DFO/MPO)
Cc: Gilmore, Kimberley; Kuiack, Sarah; Kirby, Danielle; Ladell, Kate; Chiu, Scott
Subject: RE: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Thank you Anne,
Much appreciated. We are just reviewing our draft submission with a few of our member-company biologists in Alberta, and plan to submit comments on Monday the 29th (if that is acceptable).
Thank you,

Kate

From: Phelps, Anne <Anne.Phelps@dfo-mpo.gc.ca>
Sent: July 23, 2019 8:30 AM
To: Stewart, Julie <Julie.Stewart@dfo-mpo.gc.ca>; Kate Lindsay <[redacted]>; NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Gilmore, Kimberley <Kimberley.Gilmore@dfo-mpo.gc.ca>; Kuiack, Sarah <Sarah.Kuiack@dfo-mpo.gc.ca>; Kirby, Danielle <Danielle.Kirby@dfo-mpo.gc.ca>; Ladell, Kate <Kate.Ladell@dfo-mpo.gc.ca>; Chiu, Scott <Scott.Chiu@dfo-mpo.gc.ca>
Subject: RE: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Hi Kate,
Yes, you can certainly still submit comments on the WSCT.
Thank you very much,
Anne

From: Stewart, Julie <Julie.Stewart@dfo-mpo.gc.ca>
Sent: Monday, July 22, 2019 6:51 PM
To: Kate Lindsay [redacted]; NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Gilmore, Kimberley <Kimberley.Gilmore@dfo-mpo.gc.ca>; Phelps, Anne <Anne.Phelps@dfo-mpo.gc.ca>; Kuiack, Sarah <Sarah.Kuiack@dfo-mpo.gc.ca>; Kirby, Danielle <Danielle.Kirby@dfo-mpo.gc.ca>; Ladell, Kate <Kate.Ladell@dfo-mpo.gc.ca>
Subject: RE: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Thanks for this, Kate.

On WSCT, I'll leave it to Anne to get back to you.

On SARAC...I think we're good; we can take it from here. And sorry for any confusion, since you were in communication with [redacted] ☺

Julie Stewart

Director / Directrice
Species at Risk Program / Programme des Espèces en Péril
200 rue Kent St.
Station 10W061
Ottawa, ON
K1A 0E6

(613) 949-7524 (t)
(613) 851-5933 (c)

Julie.stewart@dfo-mpo.gc.ca

From: Kate Lindsay [redacted]
Sent: Monday, July 22, 2019 5:17 PM
To: Stewart, Julie <Julie.Stewart@dfo-mpo.gc.ca>; NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Gilmore, Kimberley <Kimberley.Gilmore@dfo-mpo.gc.ca>; Phelps, Anne <Anne.Phelps@dfo-mpo.gc.ca>; Kuiack, Sarah <Sarah.Kuiack@dfo-mpo.gc.ca>; Kirby, Danielle <Danielle.Kirby@dfo-mpo.gc.ca>; Ladell, Kate <Kate.Ladell@dfo-mpo.gc.ca>
Subject: RE: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Thank you Julie, Anne and Kate. We would appreciate the opportunity to submit comments on the cutthroat trout- if possible.

On SARAC, yes I have four names [redacted] from the industry caucus that I have passed on to Chantal. All are interested in taking part in the initial scoping. 2 are more freshwater focused, and 2 are more marine- and I believe there may be more interest, depending on what the WG wants to focus on- and ideally it has both marine and freshwater components. I can send a separate note to them, bcc'ing you, if that would be helpful.

Thanks,

Kate

From: Stewart, Julie <Julie.Stewart@dfo-mpo.gc.ca>
Sent: July 22, 2019 5:12 PM
To: Kate Lindsay [redacted] NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Gilmore, Kimberley <Kimberley.Gilmore@dfo-mpo.gc.ca>; Phelps, Anne <Anne.Phelps@dfo-mpo.gc.ca>; Kuiack, Sarah <Sarah.Kuiack@dfo-mpo.gc.ca>; Kirby, Danielle <Danielle.Kirby@dfo-mpo.gc.ca>; Ladell, Kate <Kate.Ladell@dfo-mpo.gc.ca>
Subject: Re: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Hi Kate:

Hope you are well.

It's actually Kate Ladell who has the recovery document files. [redacted] I've copied Anne Phelps who is acting for her. I'm just not sure where we're at on that file.

s.19(1)

On another note... [redacted] just wanted to make sure we're moving forward with identifying an industry rep to be part of a small andd informal " steering committee" to get the aquatics working group inaugurated. I'kve made a pitch to [redacted] at AFN and to the NACOSAR members to give me a name, but also need one person from the industry side ([redacted] was identified for ENGO interests).

I'd like to get a bit of a description document done, compile a full participation list for the actual WG, map out a tentative scope of work to be endorsed by the group, and maybe some early tentative priority identification done summer/ fall.

Sent from my BlackBerry 10 smartphone on the Bell network.

From: Kate Lindsay
Sent: Monday, July 22, 2019 4:43 PM
To: NCR SARA / LEP RCN (DFO/MPO)
Cc: Stewart, Julie
Subject: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Dear Julie,

I hope you are well.
We have just realized (by mistake) that we have missed the comment period for the proposed RS for the Westslope Cutthroat Trout. Would it be at all possible for DFO to still accept them, if we submitted shortly?

Thank you, please let me know if there is another colleague at DFO I should reach out to.

Kate

Kate Lindsay
Vice President, Sustainability and Environmental Partnerships | Vice-présidente, Durabilité et partenariats environnementaux
Forest Products Association of Canada | Association des produits forestiers du Canada

e [redacted]
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facebook.com/FPAC.APFC
youtube.com/ForestProdsAssocCan

s.19(1)

Watson, Ernest

From: Watson, Ernest
Sent: Tuesday, July 30, 2019 7:41 AM
To: Kutz, Robyn
Subject: Fwd: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada
Attachments: FPAC_Comments_WSCT.pdf

-------- Original message --------
From: "Chiu, Scott" <Scott.Chiu@dfo-mpo.gc.ca>
Date: 2019-07-30 7:21 a.m. (GMT-06:00)
To: "Watson, Ernest" <Ernest.Watson@dfo-mpo.gc.ca>
Subject: FW: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

From: Kate Lindsay [redacted]
Sent: Monday, July 29, 2019 5:35 PM
To: Phelps, Anne <Anne.Phelps@dfo-mpo.gc.ca>; Stewart, Julie <Julie.Stewart@dfo-mpo.gc.ca>; NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Gilmore, Kimberley <Kimberley.Gilmore@dfo-mpo.gc.ca>; Kuiack, Sarah <Sarah.Kuiack@dfo-mpo.gc.ca>; Kirby, Danielle <Danielle.Kirby@dfo-mpo.gc.ca>; Ladell, Kate <Kate.Ladell@dfo-mpo.gc.ca>; Chiu, Scott <Scott.Chiu@dfo-mpo.gc.ca>; Sarah Todgham [redacted]
Subject: RE: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Dear Anne, Kate and the DFO team,

Thank you for the opportunity to submit comments on the Westslope Cutthroat Trout.

If you have any questions, please feel free to reach out.

Regards,

Kate

Kate Lindsay
Vice President, Sustainability and Environmental Partnerships | Vice-présidente, Durabilité et partenariats environnementaux
Forest Products Association of Canada | Association des produits forestiers du Canada

e: [redacted]
t: (613) 563-1441 x 412
410 - 99 Bank Street
Ottawa, ON K1P 6B9

[redacted]

From: Phelps, Anne <Anne.Phelps@dfo-mpo.gc.ca>
Sent: July 23, 2019 8:30 AM
To: Stewart, Julie <Julie.Stewart@dfo-mpo.gc.ca>; Kate Lindsay <[redacted]>; NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>
Cc: Gilmore, Kimberley <Kimberley.Gilmore@dfo-mpo.gc.ca>; Kuiack, Sarah <Sarah.Kuiack@dfo-mpo.gc.ca>; Kirby, Danielle <Danielle.Kirby@dfo-mpo.gc.ca>; Ladell, Kate <Kate.Ladell@dfo-mpo.gc.ca>; Chiu, Scott <Scott.Chiu@dfo-mpo.gc.ca>
Subject: RE: Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada

Hi Kate,
Yes, you can certainly still submit comments on the WSCT.
Thank you very much,
Anne

FPAC.ca
APFC.ca

July 29, 2019

Ernest Watson
Team Leader, Species at Risk Program
Fisheries and Oceans Canada
Government of Canada
ernest.watson@dfo-mpo.gc.ca

Re: Proposed Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout in Canada

Dear Mr. Watson,

Thank you for the opportunity to provide comments on the Proposed Recovery Strategy for the Westslope Cutthroat Trout (WSCT).

FPAC provides a voice for Canada's wood, pulp and paper producers nationally and internationally in government, trade, and environmental affairs. Canada's forest products industry generates $73 billion dollars annually. Canada's forest industry operates in more than 600 forest-dependent communities from coast to coast, and directly employs 230,000 Canadians across the country.

Canada's forest sector supports economic, environmental and social sustainability, utilizing stakeholder input and science-based approaches, along with engagement with local Indigenous communities. To promote sustainable development, forest management plans are compiled to outline strategic direction and commitment to conserve and maintain forest values in the area under management, including culturally significant sites, ecological flows of water systems, and biodiversity. Prior to commencing forest management activities, strategic and operational plans are required to be approved by provincial governments (often more than one department) and are audited to ensure compliance.

All of our members are also third-party certified to one of the three forest management certification standards recognized in Canada (Canadian Standards Association (CSA), Forest Stewardship Council (FSC), and Sustainable Forestry Initiative (SFI)), which also requires the protection of waterbodies within their standards. These standards involve

independent third-part audits to re-enforce that applicable laws are obeyed and timber harvesting operations are going above and beyond to ensure the conservation of biodiversity such as investments in research and strategies employed by companies for species at risk. Many companies have already applied local research into their management practices for other at-risk species, such as Bull Trout, that would also provide protection for West Slope Cutthroat.

As some of our members operate adjacent or within the WSCT habitat, we appreciate the opportunity to highlight a few of the best management practices implemented to ensure that impacts to aquatic ecosystems are avoided or mitigated. Generally, we are supportive of implementing conservation actions to support recovery and protecting and maintaining the distribution of pure populations of WSCT. However, within the proposed 2019 Recovery Strategy and Action Plan, we have some key concerns we would like to be addressed as you finalize next steps to support the recovery of this species:

Identification of Residence/ Critical Habitat

We are supportive of the additional clarification to the definition of a residence as outlined in the 2019 Proposed Recovery Strategy, "a red is considered to be the residence of this fish" (pg.3). With limited resources, this provides a focused direction to implement recovery actions for WSCT that most efficient and effective.

However, it is also observed that the definition of critical habitat has been expanded to include "areas where genetically pure populations of species formally occurred and has the **potential** to be reintroduced" (pg.13). We believe that the expansion of critical habitat may not be effective as there is no guarantee that these regions where pure populations of WSCT previously occupied will remain habitable due to climate change and shifts in species assemblages (ex. introduction of competing species such as Brook Trout). For that reason, we recommend that recovery actions should be focused on demonstrating significant recovery of pure populations before looking for opportunities to re-introduce populations where they formally occurred.

During the schedule of studies, we recommend including feasibility and effectiveness of any potential additional identified critical habitat prior to proposed amendments to critical habitat expansion, as per the point raised above. This is relevant to Schedule of Studies, item 2: "This work will help identify additional candidate sites for re-establishment of genetically pure fish and add critical habitat where considered necessary."

In addition, any results from the schedule of studies would warrant public consultation prior to amending expanded critical habitat, so that practitioners (e.g. land owners and managers) can appropriately inform of any potential socioeconomic considerations of the proposed changes.

Activities Likely to Destroy Critical Habitat

We would also encourage ECCC and DFO to re-evaluate the list of activities that are likely to destroy critical habitat as there were several references to forestry were listed, without consideration of the best management practices implemented to minimize risk to flow/temperature related alteration, impacts to invertebrate communities, and changes to the availability and transport of large woody debris.

In regards to provincial requirements, there are strict standards and guidelines that companies are required to follow which serve as rigorous processes for review and approval of forest operations. A core element of forest management planning processes are ensuring that there are adequate protections around watercourses. For instance, there are Alberta Harvest Planning and Operating Ground Rules, supported by local and provincial fish biologists that forest practitioners use to inform how forest operations should be conducted around certain watercourse classifications[1]. In smaller intermittent and ephemeral streams, buffers less than 30m have been supported where there would be little to no impact based on local conditions such as slope break, vegetation change etc. Therefore, we recommend that these existing protections and best management strategies be further understood before implementing additional requirements. We would also advise that DFO and ECCC not implement a standardized buffer approach for all watercourses.

Socio-Economic Impacts

It was observed that within the Proposed Recovery Strategy, the socio-economic impacts to non-federal lands were not fully examined nor quantified:

"**It is likely** that these actions will result in some modifications to land use practices and **possibly** restrictions on some human activities. It is anticipated that some restrictions will result in higher costs to industry. These may be associated (for example) with increased planning costs and the inability to utilize resources in some instances. Restrictions on human activities may also result from limited access to some types of recreational activities

[1] Table 2 – Standards & Guidelines for Operating Beside Watercourses: https://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/formain15749/$file/ProvGR94.pdf?OpenElement)

such as off-trail motorized recreation" (The Alberta Westslope Cutthroat Recovery Team 2013) (pg.24).

As the proposed recovery strategy is currently written, we believe that there will be significant impacts to forest operations, particularly activities related to stream crossing infrastructure construction, maintenance, repairs, and decommissioning. Constructing bridges and culverts are a common practice within forest management, which is already highly regulated by the province and forest certification, involving public consultation and monitoring activities. In requiring additional applications and ongoing maintenance, we believe this will likely result in overwhelming regulatory burden and significant risk of lost opportunity costs if existing planning processes are not considered.

Furthermore, there may be unintended interference with public safety, water quality and best management practices. For instance, alterations and maintenance of bridges and culverts may be an urgent matter following an unforeseen circumstance such as a severe weather event. Adding an additional permitting process will likely result in delays, posing a risk to human safety in remote areas where alternative crossings may not exist. Moreover, maintenance or alterations to road infrastructure will be necessary in regions vulnerable to climate change impacts, as many bridges and culverts were planned based on historic flood and climate patterns. Conflicts may also persist where forest operations are required to decommission or remove old water crossings to limit access and help restore ecological integrity, within a designated timeframe. As such, we would recommend that DFO and ECCC reconsider the activities "located within critical habitat, [that] must be reviewed by Fisheries and Oceans Canada or the Parks Canada Agency to determine whether a SARA permit and/ or Fisheries Act or other authorizations are required and can be issues" (pg. 15).

Moving Forward

It is important to ensure that the foundation of the recovery strategy is properly consulted on, before implementing action plans for a species. As such, it is recommended that this report be re-classified as a proposed recovery strategy, instead of a proposed recovery strategy and action plan, since the focus of recovery actions have changed (ex. to include formally pure populations) and the evaluation of the socioeconomic impacts on non-federal land have not been fully analyzed.

Action Plans (SARA Sec. 47) must include an evaluation of the socio-economic costs of the action plans and the benefits derived from its implementation, among other requirements. For a meaningful assessment of socioeconomic costs and benefits to go into a proposed

Action Plan, the final Recovery Strategy (RS) would need to exist beforehand. It is not appropriate to consult on both a proposed RS and Action Plan simultaneously.

Thank you again for the opportunity to provide feedback on this important topic. We encourage DFO and ECCC to reach out to FPAC if you would like to learn more about our practices, or if you have questions or comments regarding the comments raised in this submission.

We would look forward to discussing further with you.

Regards,

Sarah Todgham

Manager, Sustainability and Environmental Regulations
Forest Products Association of Canada

s.19(1)

Boulanger, Chantel

From: Minister / Ministre (DFO/MPO)
Sent: Friday, August 23, 2019 1:59 PM
To: [redacted]
Cc: PAC-SARA / LEP-PAC (DFO/MPO)
Subject: Reply from Fisheries and Oceans Canada / Réponse de Pêches et Océans Canada
Attachments: 20190710_lt_awa_dfo_wsct_rsap.pdf

Ms. Joanna Skrajny
Conservation Specialist
Alberta Wilderness Association
455-12 Street NW
Calgary AB T2N 1Y9

Dear Ms. Skrajny:

I am writing in response to your correspondence of July 10, 2019, regarding Canada's recovery strategy and action plan for the Alberta Population of Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*).

Your comments have been forwarded to the Integrated Species at Risk (SARA) team for consideration.

Thank you for writing to the Government of Canada.

Yours sincerely,

Manager
Ministerial Correspondence Unit
Fisheries and Oceans Canada
200 Kent Street / Ottawa ON, K1A 0E6
min@dfo-mpo.gc.ca / Tel: 613-992-3474 / Fax: 613-990-7292

c.c. SARA.XPAC@dfo-mpo.gc.ca

From: Joanna Skrajny [redacted]
Sent: Wednesday, July 10, 2019 12:05 PM
To: NCR SARA / LEP RCN (DFO/MPO) <SARA/LEP.XNCR@dfo-mpo.gc.ca>; Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>
Subject: AWA Comments on Recovery Strategy and Action Plan for AB Westslope Cutthroat Trout

Dear Director and Minister Wilkinson,

Alberta Wilderness Association (AWA) appreciates the opportunity to provide comments (attached) on the proposed *Recovery Strategy and Action Plan for the Alberta Population of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada*.
We appreciate your careful review of our submission and look forward to your response.

With regards,
Joanna Skrajny

Conservation Specialist
Alberta Wilderness Association

"Defending Wild Alberta through Awareness and Action"

455-12 St NW Calgary, AB T2N 1Y9
403 283.2025 www AlbertaWilderness.ca

Pages 157 to / à 162
are duplicates of
sont des duplicatas de la
page 129

Kapi, Nancita

From: Ladell, Kate
Sent: Tuesday, September 10, 2019 11:39 AM
To: Charrois, Daniel
Cc: Gilmore, Kimberley
Subject: FW: LITIGATION THREAT - FW Demand for the finalization of the Action Plan for the Alberta Westslope Cutthroat Trout
Attachments: Demand for the finalization of the SARA Action Plan for the Alberta Westslope Cutthroat Trout.pdf; DRAFT Application for the WSCT final action plan.pdf

Importance: High

Late breaking intel. Can you please indicate as much in the AE update you are writing? THx!

~~~~~~

Kate Ladell
Director, Species at Risk Operations | Directrice, Espèces en péril - opérations
Fisheries and Oceans Canada | Pêches et Océans Canada
Telephone | Téléphone: 613-971-2010
Mobile | Cellulaire: 613-462-2019

From: Toyne, Melanie <Melanie.Toyne@dfo-mpo.gc.ca>
Sent: Tuesday, September 10, 2019 10:50 AM
To: Curtis, Martyn <Martyn.Curtis@dfo-mpo.gc.ca>; Ladell, Kate <Kate.Ladell@dfo-mpo.gc.ca>; Stewart, Julie <Julie.Stewart@dfo-mpo.gc.ca>; Hoggarth, Thomas <Thomas.Hoggarth@dfo-mpo.gc.ca>
Subject: LITIGATION THREAT - FW Demand for the finalization of the Action Plan for the Alberta Westslope Cutthroat Trout
Importance: High

Good Morning Everyone,
Timberwolf has submitted another letter to the Minister, now demanding posting of the RS-AP by Nov 15, or the attached draft application for judicial review will be filed.
We have the RS-AP ready to send to NHQ, but are waiting to hear from Parks about the consultation piece. Nicole McCutchen emailed me yesterday saying they will have a response to us this week.

Have a great day!
Melanie

From: Boyko, Amy <Amy.Boyko@dfo-mpo.gc.ca>
Sent: Tuesday, September 10, 2019 7:45 AM
To: Toyne, Melanie <Melanie.Toyne@dfo-mpo.gc.ca>
Cc: Watson, Ernest <Ernest.Watson@dfo-mpo.gc.ca>; Rodger, Peter <Peter.Rodger@dfo-mpo.gc.ca>
Subject: FW: Demand for the finalization of the Action Plan for the Alberta Westslope Cutthroat Trout

FYI. This was in the consultation inbox.
~~~~~~

From: Drew Yewchuk <[redacted]
Sent: September 9, 2019 4:48 PM
To: Jonathan.Wilkinson@parl.gc.ca; Minister / Ministre (DFO/MPO) <Min.XNCR@dfo-mpo.gc.ca>; C&A SARA Consultations / C&A LEP Consultations (DFO/MPO) <fwisar@dfo-mpo.gc.ca>; mcu@justice.gc.ca
Subject: Demand for the finalization of the Action Plan for the Alberta Westslope Cutthroat Trout

Hello,

Please find attached a demand for the finalization of the *Species at Risk Act* Recovery Strategy - Action Plan for the Alberta population of Westslope Cutthroat Trout, and an un-filed draft of the application for judicial review mentioned therein.

A signed paper copy will follow.

Drew Yewchuk
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September 9, 2019

The Honourable Jonathan Wilkinson
Minister of Fisheries and Oceans and the Canadian Coastguard
Min@dfo-mpo.gc.ca
Jonathan.Wilkinson@parl.gc.ca

The Honourable David Lametti
Minister of Justice and Attorney General of Canada
David.Lametti@parl.gc.ca

SARA Directorate
Department of Fisheries and Oceans
fwisar@dfo-mpo.gc.ca

This is a demand for the finalization of the *Species at Risk Act* Recovery Strategy-Action Plan for the Alberta population of Westslope Cutthroat Trout.

I am legal counsel for the Timberwolf Wilderness Society (hereafter "The Petitioner") in respect of this matter. The Petitioner is interested in and greatly concerned about the survival and recovery of the Alberta population of Westslope Cutthroat Trout.

Section 50 of the *Species At Risk Act*, SC 2002 c 29 [*SARA*] requires a 60 day comment period, followed by a 30 day period for the competent Minister to review the comments, make necessary changes, and finalize the Action Plan. Section 43 of *SARA* sets the same timeframes for Recovery Strategies. The Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout was posted to the Species at Risk Registry on May 14, 2019, the 60 day comment period ended July 13, 2019, and the deadline to finalize the plan was August 13, 2019.

The Petitioners have previously written to the Minister about the urgent situation of the Westslope Cutthroat Trout, and are insistent that compliance with each statutory requirement of *SARA* is important for the recovery of the species.

It has been the experience of the petitioners that statutory deadlines in relation to the Westslope Cutthroat Trout have been overlooked by the Department of Fisheries and Oceans and action has only been taken when legal proceedings have been filed. The petitioners have taken this experience to heart. I have instructions to file for judicial review if a Recovery Strategy-Action Plan that identifies sufficient critical habitat to align with current scientific knowledge and the precautionary principle is not finalized and posted to the *SARA* registry by November 15, 2019. A draft of the application accompanies this letter.

Sincerely,

Drew Yewchuk
Public Interest Law Clinic
Staff Lawyer

Court File No. _____

FEDERAL COURT

BETWEEN:

TIMBERWOLF WILDERNESS SOCIETY

Applicant

AND:

MINISTER OF FISHERIES, OCEANS AND THE CANADIAN COAST GUARD

Respondent

APPLICATION UNDER SECTION 18.1 OF THE *FEDERAL COURTS ACT*, RSC 1985, c F-7

NOTICE OF APPLICATION

TO THE RESPONDENT:

A PROCEEDING HAS BEEN COMMENCED by the Applicant. The relief claimed by the Applicant appears on the following pages.

THIS APPLICATION will be heard by the Court at a time and place to be fixed by the Judicial Administrator. Unless the Court orders otherwise, the place of hearing will be as requested by the Applicant. The Applicant requests that this application be heard at **Calgary, Alberta**.

IF YOU WISH TO OPPOSE THIS APPLICATION, to receive notice of any step in the application or to be served with any documents in the application, you or a solicitor acting for you must file a notice of appearance in Form 305 prescribed by the *Federal Courts Rules* and serve it on the Applicant's solicitor or, where the applicant is self-represented, on the applicant, WITHIN 10 DAYS after being served with this notice of application.

Copies of the *Federal Courts Rules*, information concerning the local offices of the Court and other necessary information may be obtained on request to the Administrator of this Court at Ottawa (telephone 613-992-4238) or at any local office.

IF YOU FAIL TO OPPOSE THIS APPLICATION, JUDGMENT MAY BE GIVEN IN YOUR ABSENCE AND WITHOUT FURTHER NOTICE TO YOU.

Date: _____ Issued by: _____

Address of local office:

Federal Court of Canada
3rd Floor, 635 – 8th Avenue SW
Calgary, Alberta
T2P 3M3

TO:

MINISTER OF FISHERIES, OCEANS AND THE CANADIAN COAST GUARD
200 Kent Street
Ottawa, Ontario K1A 0E6
Tel: (613) 992-3474
Fax: (613) 947-7081

ATTORNEY GENERAL OF CANADA
284 Wellington Street
East Memorial Building, 4th Floor
Ottawa, Ontario K1A 0H8
Tel: (613) 992-4621
Fax: (613) 990-7255

APPLICATION

This is an application for judicial review in respect of the failure of the Minister of Fisheries, Oceans and the Canadian Coast Guard (**Minister**) to finalize an action plan under sections 50 of the *Species at Risk Act*, SC 2002, c 29 (***SARA***) for the Alberta population of Westslope Cutthroat Trout on provincial lands in accordance with sections 38 and 49 of *SARA*.

The Applicant makes this application for:

1. An order in the nature of mandamus compelling the Minister to include on the *SARA* public registry a final action plan for the Alberta population of Westslope Cutthroat Trout on provincial lands in accordance with sections 50 of *SARA*, within 15 days of judgment in this matter.

2. An order that this Honourable Court retains jurisdiction over the matter of the Minister's obligation to post a final action plan for the Alberta population of Westslope Cutthroat Trout on provincial lands that complies with the requirements of section 49 of *SARA*.

3. An order that the Minister shall pay the applicant's costs for this application, pursuant to Rule 400 of the *Federal Courts Rules* and recognizing the public interest in having these proceedings litigated.

4. Such further and other relief as this Honourable Court may deem just.

The grounds for the application are:

The Parties

5. The Applicant, Timberwolf Wilderness Society, is a provincially registered non-profit society dedicated to protecting Alberta's environment, wilderness

areas, and species at risk. The Applicant brings this application as a public interest litigant.

6. The Applicant has a genuine interest in the administration of *SARA* and the Minister's compliance with his duties in a manner that serves the remedial purposes of *SARA*. The Applicant is concerned with the lawful and effective application of *SARA* to restore and protect species at risk in Alberta.

7. The Applicant has extensive knowledge on the conservation status and habitat requirements of the Alberta population of Westslope Cutthroat Trout.

8. The Respondent is the competent Minister for administering *SARA* in relation to the Alberta population of Westslope Cutthroat Trout on provincial lands.

The Alberta population of Westslope Cutthroat Trout

9. In May 2005 the Committee on the Status of Endangered Wildlife in Canada (**COSEWIC**) classified the Alberta population of Westslope Cutthroat Trout as a threatened species. The COSEWIC assessment was included in the public registry on August 30, 2007.

10. In December 2007 the Minister issued a response statement under section 25(3) of *SARA* detailing how the Minister intended to respond to the COSEWIC assessment.

11. On March 27, 2013, the Governor in Council, on the recommendation of the Minister, listed the Alberta population of Westslope Cutthroat Trout as a threatened species under *SARA*.

12. On March 28, 2014 the Minister included a final Recovery Strategy for the Alberta population of Westslope Cutthroat Trout (**2014 Recovery Strategy**) on the public registry.

13. The 2014 Recovery Strategy recognizes:

a. the objective of identifying opportunities to help recover pure and near-pure populations of Westslope Cutthroat Trout, partly by restoring habitat and eliminating or suppressing populations of non-native fish that are having negative impacts on Westslope Cutthroat Trout;

b. that improperly placed and obstructed culverts that block Westslope Cutthroat Trout access to upstream networks are very common, and that if Westslope Cutthroat Trout cannot move past culverts to complete their life-history the amount of habitat lost is potentially very large;

c. that roads and forestry operations have multiple deleterious effects on critical habitat, and are a major threat to the Westslope Cutthroat Trout that could be reduced or eliminated if appropriate regulatory reviews and management actions are exercised;

d. that severely fragmented habitat and small, isolated populations place each remnant population of Westslope Cutthroat Trout at high risk of extinction from genetic factors and random catastrophes; and

e. that the critical habitat of the Westslope Cutthroat Trout was only partially identified in the Recovery Strategy, and that the areas identified as critical habitat will be insufficient to achieve the population and distribution objectives for the Westslope Cutthroat Trout.

14. On December 2, 2015, the Minister published in the Canada Gazette a Critical Habitat Order made under section 58 of *SARA* for the Alberta population of Westslope Cutthroat Trout on provincial lands.

15. On October 24, 2017, the Minister included an updated COSEWIC assessment of the Westslope Cutthroat Trout on the public registry which states:

    a. the Alberta population of Westslope Cutthroat Trout has been extirpated from large portions of the watershed that was their habitat, and that hybridization is widespread, with the number of streams expected to have pure strains of Westslope Cutthroat Trout dropping from 61 streams in 2007 to 51 streams in 2014;

    b. conditions for the Westslope Cutthroat Trout continue to deteriorate due to ongoing development;

    c. most habitat patches are too small to support a viable population in the long term;

    d. there has been an observed decline in the number of subpopulations, area of occupancy, abundance, and occurrence of the Westslope Cutthroat Trout.

16. A proposed combined Recovery Strategy and Action Plan for the Alberta Populations of Westslope Cutthroat Trout was included on the public registry on May 14, 2019. It has not been finalized.

The Minister's legal obligation to issue an action plan

17. Section 50(1) of *SARA* requires the Minister to include a proposed action plan in the public registry. Section 50(2) requires the Minister to hold a 60 day comment period for any person to file written comments. Section 50(3) requires the Minister to make any changes to the proposed action plan that he or she considers appropriate and finalize the action plan within 30 days of the end of the comment period.

18. Section 38 of *SARA* requires the Minister to consider the precautionary principle when preparing a recovery strategy or action plan, as follows: "If there are threats of serious or irreversible damage to the listed wildlife species, cost-effective measures to prevent the reduction or loss of the species should not be postponed for a lack of full scientific certainty."

19. The 2014 Recovery Strategy states that an action plan for the Alberta population of Westslope Cutthroat Trout will be completed by March 31, 2015.

20. Section 49 of *SARA* states that an action plan must include the following:

    a. an identification of the species' critical habitat, to the extent possible, based on the best available information and consistent with the recovery strategy, and examples of activities that are likely to result in its destruction;

    b. a statement of the measures that are proposed to be taken to protect the species' critical habitat, including the entering into of agreements under section 11;

c. an identification of any portions of the species' critical habitat that have not been protected;

d. a statement of the measures that are to be taken to implement the recovery strategy, including those that address the threats to the species and those necessary to achieve the population and distribution objectives, as well as an indication as to when these measures are to take place;

e. the methods to be used to monitor the recovery of the species and its long-term viability;

f. an evaluation of the socio-economic costs of the action plan and the benefits to be derived from its implementation; and

g. any other matters that are prescribed by the regulations.

21. At the request of the Applicant, on May 31, 2017 the Minister included on the public registry a summary statement of what has been prepared in relation to an action plan for the Alberta population of Westslope Cutthroat Trout as required by section 50(4) of *SARA*.

22. The Minister's summary statement indicated that delaying the completion of the action plan for the Alberta population of Westslope Cutthroat Trout was necessary in order to improve the quality and thoroughness of the action plan and to incorporate the most thorough and up-to-date genetic information on the Westslope Cutthroat Trout.

The Minister has failed to finalize an action plan for the Alberta population of Westslope Cutthroat Trout on provincial lands

23. The Minister has failed to include on the public registry a final action plan for the Alberta population of Westslope Cutthroat Trout on provincial lands, and the 30 day period to make changes and finalize the plan expired August 13, 2019.

24. Sufficient information is available to the Minister to identify:

    a. several sub-populations of Westslope Cutthroat Trout on provincial lands that face a short term threat of irreversible damage;

    b. additional critical habitat, including riparian habitat, for the Alberta population of Westslope Cutthroat Trout on provincial lands; and

    c. particular measures necessary for preserving the remaining Alberta population of Westslope Cutthroat Trout on provincial lands.

25. The Minister's failure to finalize an action plan for the Alberta population of Westslope Cutthroat Trout:

    a. deprives the Westslope Cutthroat Trout of legal protection for habitat necessary for their survival or recovery that has not been identified as critical habitat in the Recovery Strategy;

    b. slows the recovery actions necessary to recover the Westslope Cutthroat Trout and prevent further loss of genetic diversity;

    c. allows the threats to the survival and recovery of the Westslope Cutthroat Trout identified in the Recovery Strategy to continue unaddressed and unmonitored;

d. violates the precautionary principle; and

e. frustrates the scheme and purpose of *SARA*.

General Grounds for the Application

26. The Applicant relies on sections 18 and 18.1 of the *Federal Courts Act,* the *Federal Courts Rules*, *SARA*, and such further grounds as counsel may identify and this Honourable Court may consider.

This Application will be supported by the following material:

1. The Affidavit of David W. Mayhood, to be served.

2. Material in the possession of the Minister and the Department of Fisheries and Oceans Canada.

3. Material included on the *SARA* public registry.

4. Such further and other materials as counsel may advise and the court may allow.

Date: September 8, 2019

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